IMPORTANT NOTICE

NOT FOR DISTRIBUTION IN OR INTO THE UNITED STATES OR TO U.S. PERSONS EXCEPT TO PERSONS WHO ARE QUALIFIED INSTITUTIONAL BUYERS PURSUANT TO RULE 144A UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"). NOT FOR DISTRIBUTION ELSEWHERE OR OTHERWISE THAN TO PERSONS TO WHOM IT CAN LAWFULLY BE DISTRIBUTED.

IMPORTANT: You must read the following disclaimer before continuing. The following disclaimer applies to the attached offering memorandum. You are advised to read this disclaimer carefully before accessing, reading or making any other use of the attached offering memorandum. In accessing the attached offering memorandum, you agree to be bound by the following terms and conditions, including any modifications to them from time to time, each time you receive any information as a result of such access.

CONFIRMATION OF YOUR REPRESENTATION: By accessing the attached offering memorandum, you shall be deemed to have represented that (a) you consent to delivery of the attached offering memorandum and any amendments or supplements thereto by electronic transmission and (b) either (i) you are a "qualified institutional buyer" (as defined in Rule 144A under the Securities Act), or (ii) (A) you are outside the United States and are not a U.S. Person (as defined in Regulation S under the Securities Act), nor acting on behalf of a U.S. Person and, to the extent you purchase the Securities (as defined herein) described in the attached offering memorandum, you will be doing so pursuant to Regulation S under the Securities Act, and (B) the electronic mail address to which the attached offering memorandum has been delivered is not located in the United States.

The attached offering memorandum has been made available to you in electronic form. You are reminded that documents transmitted via this medium may be altered or changed during the process of transmission and consequently none of Deutsche Telekom AG and Deutsche Telekom International Finance B.V., none of Citigroup Global Markets Inc., RBC Capital Markets, LLC, TD Securities (USA) LLC, MUFG Securities Americas Inc., NatWest Markets Securities Inc. and Société Générale (collectively, the "**Initial Purchasers**") or any of their respective affiliates, directors, officers, employees, representatives and agents or any other person controlling them accepts any liability or responsibility whatsoever in respect of any discrepancies between the offering memorandum distributed to you in electronic format and the hard copy version available to you on request from the Initial Purchasers.

Restrictions: The attached offering memorandum is being furnished in connection with an offering exempt from registration under the Securities Act. Nothing in this electronic transmission constitutes an offer of securities for sale in the United States or to any U.S. Person.

THE ATTACHED OFFERING MEMORANDUM IS BEING PROVIDED TO YOU ON A CONFIDENTIAL BASIS FOR INFORMATIONAL USE SOLELY IN CONNECTION WITH YOUR CONSIDERATION OF THE PURCHASE OF THE SECURITIES REFERRED TO THEREIN. YOU ARE NOT AUTHORIZED TO, AND YOU MAY NOT, FORWARD OR DELIVER THE ATTACHED OFFERING MEMORANDUM, ELECTRONICALLY OR OTHERWISE, TO ANY OTHER PERSON OR REPRODUCE SUCH OFFERING MEMORANDUM IN ANY MANNER WHATSOEVER. ANY FORWARDING, DISTRIBUTION OR REPRODUCTION OF THIS DOCUMENT AND THE ATTACHED OFFERING MEMORANDUM, IN WHOLE OR IN PART, IS UNAUTHORIZED. FAILURE TO COMPLY WITH THIS DIRECTIVE MAY RESULT IN A VIOLATION OF THE SECURITIES ACT OR THE APPLICABLE LAWS OF OTHER JURISDICTIONS.

THE NOTES TO BE ISSUED AND THE GUARANTEES OF THE NOTES (THE "**SECURITIES**") HAVE NOT BEEN, AND WILL NOT BE, REGISTERED UNDER THE SECURITIES ACT OR THE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES OR OTHER JURISDICTION. THE SECURITIES MAY NOT BE OFFERED OR SOLD IN THE UNITED STATES OR TO OR FOR THE ACCOUNT OR BENEFIT OF U.S. PERSONS (AS SUCH TERMS ARE DEFINED IN REGULATION S UNDER THE SECURITIES ACT) UNLESS REGISTERED UNDER THE SECURITIES ACT OR PURSUANT TO AN EXEMPTION FROM SUCH REGISTRATION.

The distribution of the attached offering memorandum and the offer, sale or solicitation of an offer to buy the Securities is restricted by law in certain jurisdictions. The attached offering memorandum may not be used for, or in connection with, and does not constitute, any offer to sell or solicitation of an offer to buy the Securities by anyone in any jurisdiction or under any circumstance in which such offer or solicitation is not authorized or is unlawful. Persons into whose possession the attached offering memorandum may come are required to inform themselves about and to observe such restrictions. Further information with regard to restrictions on offers, sales and deliveries of the Securities and the distribution of the attached offering memorandum and other offering material relating to the Securities is set out under "Plan of Distribution" in the attached offering memorandum.

No action has been or will be taken in any jurisdiction that would, or is intended to, permit a public offering of the Securities, or possession or distribution of the offering memorandum (in preliminary, proof or final form) or any other offering or publicity material relating to the Securities, in any country or jurisdiction where action for that purpose is required. If a jurisdiction requires that the offering be made by a licensed broker or dealer and any of the Initial Purchasers or any affiliate of the Initial Purchasers is a licensed broker or dealer in that jurisdiction, the offering will be deemed to be made by the Initial Purchasers or such affiliate on behalf of the issuer, Deutsche Telekom International Finance B.V., in such jurisdiction.

You are reminded that the attached offering memorandum has been delivered to you on the basis that you are a person into whose possession the attached offering memorandum may be lawfully delivered in accordance with the laws of the jurisdiction in which you are located. If you receive this document by e-mail, you should not reply by e-mail to this announcement. Any reply e-mail communications, including those you generate by using the "Reply" function on your e-mail software, will be ignored or rejected. If you receive this document by e-mail, your use of this e-mail is at your own risk and it is your responsibility to take precautions to ensure that it is free from viruses and other items of a destructive nature.

Deutsche Telekom International Finance B.V.

$1,200,000,000 4.375% Notes due June 21, 2028
$550,000,000 4.750% Notes due June 21, 2038

Guaranteed as to Payment of Principal and Interest by Deutsche Telekom AG

Pursuant to this offering memorandum, Deutsche Telekom International Finance B.V. ("Finance" or the "Issuer") is offering $1,200,000,000 4.375% Notes due June 21, 2028 (the "2028 Notes") and $550,000,000 4.750% Notes due June 21, 2038 (the "2038 Notes" and, together with the 2028 Notes, the "Notes"). Deutsche Telekom AG ("Deutsche Telekom" or the "Guarantor") is the guarantor of the Notes.

Finance will pay interest on the Notes at an annual rate of 4.375% on the 2028 Notes and 4.750% on the 2038 Notes, from June 21, 2018, semi-annually in arrears on June 21 and December 21 of each year, commencing on December 21, 2018.

Finance may redeem the Notes on the terms described in this offering memorandum under "*Description of the Notes and Guarantees—Optional Redemption*". Finance may also redeem the Notes at 100% of their principal amount plus accrued interest if certain tax events occur as described under "*Description of the Notes and Guarantees—Optional Tax Redemption*".

Investing in the Notes involves risks. See "Risk Factors" beginning on page 16.

The Notes have not been and will not be registered under the U.S. Securities Act of 1933, as amended (the "Securities Act") or any state or other securities laws. The Notes may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons, except to qualified institutional buyers ("QIBs") in reliance on the exemption from registration provided by Rule 144A under the Securities Act ("Rule 144A") and to certain non-U.S. persons in offshore transactions in reliance on Regulation S under the Securities Act ("Regulation S"). Prospective purchasers are hereby notified that sellers of the Notes may be relying on the exemption from the provisions of Section 5 of the Securities Act provided by Rule 144A. The Notes are not transferable except in accordance with the restrictions described under "*Transfer Restrictions*".

2028 Notes Issue Price: 99.552%
2038 Notes Issue Price: 99.349%

plus, in each case, accrued interest from June 21, 2018 if settlement occurs after that date.

The Notes will be represented by one or more global notes registered in the name of The Depository Trust Company ("DTC"), as depositary, or a nominee of DTC. Beneficial interests in the Notes will be shown on, and transfers thereof, will be effected through, records maintained by DTC, Clearstream Banking, *société anonyme* ("Clearstream") and Euroclear Bank SA/NV ("Euroclear"), and their respective participants. See "*Book-Entry; Delivery and Form; Summary of Provisions Relating to Notes in Global Form*" and "*Transfer Restrictions*".

The Initial Purchasers (as defined in "*Plan of Distribution*") expect to deliver the Notes against payment in immediately available funds on or about June 21, 2018.

Joint Book-Running Managers

Citigroup	**RBC Capital Markets**	**TD Securities**
MUFG	**NatWest Markets**	**Société Générale Corporate & Investment Banking**

June 14, 2018

We are responsible for the information contained in this offering memorandum. We have not authorized anyone to give you any other information, and we take no responsibility for any other information that others may give you. You should assume that the information appearing in this offering memorandum is accurate as of the date on the front cover of this offering memorandum only. Our business, financial condition, results of operations and prospects may have changed since that date.

This offering memorandum is confidential. You are authorized to use this offering memorandum solely for the purpose of considering the purchase of the Notes described in this offering memorandum. You may not reproduce or distribute this offering memorandum, in whole or in part, and you may not disclose any of the contents of this offering memorandum or use any information herein for any purpose other than considering a purchase of the Notes. You agree to the foregoing by accepting delivery of this offering memorandum.

Each investor in the Notes will be deemed to make certain representations, warranties and agreements regarding the manner of purchase and subsequent transfers of the Notes. These representations, warranties and agreements are described in "*Transfer Restrictions*".

The Initial Purchasers make no representation or warranty, expressed or implied, as to the accuracy or completeness of such information, and nothing contained in this offering memorandum is, or shall be relied upon as, a promise or representation by the Initial Purchasers. Neither we, nor the Initial Purchasers, nor any of our or their respective representatives make any representation to any offeree or purchaser of the Notes offered hereby regarding the legality of an investment by such offeree or purchaser under applicable legal investment or similar laws. You should consult with your own advisers as to legal, tax, business, financial and related aspects of a purchase of the Notes. Notwithstanding anything herein to the contrary, investors may disclose to any and all persons, without limitation of any kind, the U.S. federal or state income tax treatment and tax structure of the offering and all materials of any kind (including opinions or other tax analyses) that are provided to the investors relating such tax treatment and tax structure. However, any information relating to the U.S. federal income tax treatment or tax structure shall remain confidential (and the foregoing sentence shall not apply) to the extent reasonably necessary to enable any person to comply with applicable securities laws. For this purpose, "tax structure" means any facts relevant to the U.S. federal or state income tax treatment of the offering but does not include information relating to the identity of the issuer of the securities, the issuer of any assets underlying the securities, or any of their respective affiliates that are offering the securities.

In connection with the issue of the Notes, one or more of Citigroup Global Markets Inc., RBC Capital Markets, LLC and TD Securities (USA) LLC (the "Stabilizing Manager(s)") (or persons acting on behalf of any Stabilizing Manager(s)) may over-allot Notes or effect transactions with a view to supporting the market price of the Notes at a level higher than that which might otherwise prevail. However, there is no assurance that the Stabilizing Manager(s) (or persons acting on behalf of a Stabilizing Manager) will undertake stabilization action. Any stabilization action may begin on or after the date on which adequate public disclosure of the final terms of the offer of the Notes is made and, if begun, may be ended at any time but must end no later than the earlier of 30 days after the issue date of the Notes and 60 days after the date of the allotment of the Notes. Any stabilization action or over-allotment must be conducted by the relevant Stabilizing Manager(s) (or person(s) acting on behalf of any Stabilizing Manager(s)) in accordance with all applicable laws and rules.

NOTICE TO INVESTORS IN THE UNITED KINGDOM

This offering memorandum is only being distributed to and is only directed at (i) persons who are outside the United Kingdom or (ii) investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order") or (iii) high net worth companies, and other persons to whom it may lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "relevant persons"). The Notes are only available to, and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such Notes will be engaged in only with, relevant persons. Any person who is not a relevant person should not act or rely on this document of any of its contents.

NOTICE TO INVESTORS IN THE EUROPEAN ECONOMIC AREA

In relation to each Member State of the European Economic Area (the "EEA"), each initial purchaser has represented, warranted and agreed that it has not made and will not make an offer of Notes to the public in that Member State except that it may make an offer of Notes to the public in that Member State:

(a) to any legal entity which is a qualified investor as defined in the Prospectus Directive;

(b) to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the relevant Initial Purchaser or Initial Purchasers nominated by the Issuer for any such offer; or

(c) in any other circumstances falling within Article 3(2) of the Prospectus Directive;

provided that no such offer of Notes shall require the Issuer, the Guarantor or any Initial Purchasers to publish a prospectus pursuant to Article 3 of the Prospectus Directive or supplement a prospectus pursuant to Article 16 of the Prospectus Directive, in each case, in relation to such offer. Neither the Issuer nor the Guarantor nor the Initial Purchasers have authorized, nor do they authorize, the making of any offer of Notes in circumstances in which an obligation arises for the Issuer, the Guarantor or the Initial Purchasers to publish or supplement a prospectus for such offer.

For the purposes of this provision, the expression an "offer of Notes to the public" in relation to any Notes in any Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe the Notes, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State and the expression "Prospectus Directive" means Directive 2003/71/EC (as amended by Directive 2010/73/EU), and includes any relevant implementing measure in the Member State.

This EEA selling restriction is in addition to any other selling restrictions set out under "*Plan of Distribution—Selling restrictions*" in this offering memorandum.

NOTICE TO INVESTORS IN CANADA

The Notes may be sold in Canada only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the Notes must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this offering memorandum (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the Initial Purchasers are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

MIFID II PRODUCT GOVERNANCE/PROFESSIONAL INVESTORS AND ECPS ONLY TARGET MARKET

Solely for the purposes of the manufacturer's product approval process, the target market assessment in respect of the Notes has led to the conclusion that: (i) the target market for the Notes is eligible counterparties and professional clients only, each as defined in Directive 2014/65/EU (as amended, "MiFID II"); and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the Notes (a "distributor") should take into consideration the manufacturer's target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the manufacturer's target market assessment) and determining appropriate distribution channels.

TABLE OF CONTENTS

	Page
Defined Terms and Financial Information	1
Available Information	1
Market, Ranking and Other Data	1
Incorporation of Certain Information by Reference	2
Forward-Looking Statements	3
Limitation on Enforcement of U.S. Laws Against the Guarantor, the Issuer, Their Management and Others	5
Special Note on Non-GAAP Financial Measures	6
Exchange Rate Information	8
Summary	9
Risk Factors	16
Use of Proceeds	36
Capitalization and Indebtedness	37
Description of Our Business and Operations	39
Development of Our Business	51
Regulation	118
Legal Proceedings	129
Directors, Senior Management and Employees	133
Additional Information	143
Description of the Notes and Guarantees	148
Book-Entry; Delivery and Form; Summary of Provisions Relating to Notes in Global Form	157
Taxation	161
Plan of Distribution	168
Transfer Restrictions	173
Legal Matters	176
Independent Accountants	176
General Information	176

DEFINED TERMS AND FINANCIAL INFORMATION

As used in this offering memorandum, unless the context otherwise requires, the terms "we", "us", "our", "Company", and "Group" refer to Deutsche Telekom AG and its consolidated subsidiaries. The "Guarantor" and "Deutsche Telekom" refer to Deutsche Telekom AG.

As used in this offering memorandum, "euro", "EUR" or "€" means the single unified currency that was introduced in the Federal Republic of Germany (the "Federal Republic") and ten other participating Member States of the European Union (the "EU") on January 1, 1999. "U.S. dollar", "USD" or "$" means the lawful currency of the United States of America. "British pounds sterling", "GBP" or "£" means the lawful currency of the United Kingdom.

Unless otherwise indicated, the financial information contained in this offering memorandum has been prepared in accordance with the requirements of the International Financial Reporting Standards ("IFRS") as adopted for use in the EU by the European Commission.

Rounding adjustments have been made in calculating some of the financial information included in this offering memorandum. As a result, figures shown as totals in some tables may not be exact arithmetic aggregations of the figures that comprise them.

In this offering memorandum, increases in negative numbers are expressed as positive percentages.

AVAILABLE INFORMATION

For so long as any of the Notes are "restricted securities" within the meaning of Rule 144(a)(3) under the Securities Act, during any period during which the Guarantor is neither subject to Sections 13 or 15(d) of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act") nor exempt from reporting pursuant to Rule 12g3-2(b) under the Exchange Act, the Issuer and the Guarantor will make available on request to each holder in connection with any resale thereof and to any prospective purchaser of such Notes from such holder, in each case upon request, the information specified in and meeting the requirements of Rule 144A(d)(4) under the Securities Act.

A copy of the fiscal and paying agency agreement to be entered into by Deutsche Telekom, Finance and Citibank, N.A. ("Citibank"), as fiscal agent, is available to holders of the Notes upon request, at no charge, from Citibank, N.A., Agency & Trust, 388 Greenwich Street, 6th Floor, New York, New York 10013, United States of America, and from Deutsche Telekom AG, Friedrich-Ebert-Allee 140, 53113 Bonn, Germany.

MARKET, RANKING AND OTHER DATA

The data included in this offering memorandum regarding markets, including the size of certain market segments and the Guarantor's position within these markets, are based on independent industry publications, reports of government agencies or other published industry sources and the Guarantor's estimates based on its management's knowledge and experience in the market segments in which it operates. The Guarantor's estimates are based on information obtained from customers, suppliers, trade and business organizations and other contacts in the market segments in which it operates. The Guarantor has not independently verified any of the data from third-party sources nor has it ascertained the underlying economic assumptions relied upon therein. The Guarantor believes these estimates to be accurate as of the date of this offering memorandum. However, this information may prove to be inaccurate because of the methods used to obtain some of the data for these estimates or because this information cannot always be verified with complete certainty due to the limits on the availability and reliability of raw data, the voluntary nature of the data gathering process and other inherent limitations and uncertainties.

World Wide Web addresses contained in this offering memorandum are for explanatory purposes only and they (and the content contained therein) do not form a part of, and are not incorporated by reference into, this offering memorandum.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

This offering memorandum incorporates by reference, and should be read and construed in conjunction with, the following information:

Table of Documents Incorporated by Reference

Document	**Pages Incorporated**
A. The following sections of the Deutsche Telekom Interim Group Report for January 1 to March 31, 2018:	
Condensed Consolidated Interim Financial Statements	27-56
Responsibility Statement	57
Review Report	58
(together, the "**2018 Interim Report Excerpts**")	
B. The following sections of the Deutsche Telekom Annual Report for the 2017 Financial Year:	
Consolidated Financial Statements	145-247
Responsibility Statement	248
Independent Auditor's Report	249-254
(together, the "**2017 Annual Report Excerpts**")	
C. The following sections of the Deutsche Telekom Annual Report for the 2016 Financial Year:	
Consolidated Financial Statements	125-217
Responsibility Statement	218
Independent Auditor's Report	219-223
(together, the "**2016 Annual Report Excerpts**")	

The information contained in each document incorporated by reference herein is given as of the date of such document. Such information shall be deemed to be incorporated in, and form part of, this offering memorandum, save that any statement contained in a document which is deemed to be incorporated by reference herein shall be deemed to be modified or superseded for the purpose of this document to the extent that a statement contained or incorporated herein modifies or supersedes such earlier statement (whether expressly, by implication or otherwise). Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this offering memorandum.

You may obtain a copy of the 2018 Interim Report Excerpts, the 2017 Annual Report Excerpts and the 2016 Annual Report Excerpts by visiting our website at https://www.telekom.com/en/investor-relations/service/downloads.

Other than the sections specified above and specifically incorporated by reference in this offering memorandum, such documents do not form part of this offering memorandum and the contents of Deutsche Telekom's internet website do not form part of this offering memorandum and, in each case, should not be relied upon for the purposes of forming an investment decision with respect to the Notes.

FORWARD-LOOKING STATEMENTS

This offering memorandum contains forward-looking statements. Forward-looking statements are statements that are not historical facts. Examples of forward-looking statements include statements concerning:

- plans, objectives and expectations relating to future operations, products and services;
- expectations of future financial performance and their underlying assumptions, including, but not limited to, statements describing our expectations of future revenue, adjusted EBITDA and free cash flow development;
- our prospective share of new and existing markets;
- plans, objectives and expectations for our cost savings and workforce reduction initiatives and the impact of other significant strategic, labor or business initiatives, including acquisitions, dispositions and business combinations, and investments in networks and new spectrum and other expansion initiatives;
- the potential impact of regulatory actions on our financial condition and operations;
- our shareholder remuneration policy and the payment of dividends and/or carrying out of possible share repurchases;
- the possible outcomes and effects of litigation, investigations, contested regulatory proceedings and other disputes;
- future general telecommunications sector and macroeconomic growth rates; and
- our future revenues, expenditures and performance.

Forward-looking statements generally are identified by the words “expect”, “anticipate”, “believe”, “intend”, “estimate”, “aim”, “goal”, “plan”, “will”, “will continue”, “seek”, “outlook”, “guidance” and similar expressions.

Forward-looking statements are based on current plans, estimates and projections. You should consider them with caution. Forward-looking statements speak only as of the date they are made, and we undertake no obligation to update any forward-looking statement in light of new information or future events. Forward-looking statements involve inherent risks and uncertainties, most of which are difficult to predict and are generally beyond our control. We caution you that a number of important factors could cause actual results or outcomes to differ materially from those expressed in, or implied by, forward-looking statements, in particular forward-looking statements related to our expectations of future revenue, adjusted EBITDA and free cash flow development. These factors include, among others:

- changes in general economic and business conditions, including a deterioration in the economic environment, in the markets in which we and our subsidiaries and associated companies operate;
- the level of demand for telecommunications services in the markets we serve, particularly for wireless telecommunications services, broadband access lines, voice and data traffic, new higher-value products and services and new rate offerings;
- changes in government policies and new legislation;
- regulatory developments and changes, including with respect to the levels of tariffs, terms of interconnection, customer access, international settlement arrangements and the availability and allocation of radio and television spectrum for mobile telecommunications use;
- scarcity and cost of additional wireless spectrum;
- our ability to secure and retain the licenses needed to offer new and existing services and the cost of these licenses and related network infrastructure build-outs, particularly with respect to advanced services;
- competitive forces, including pricing pressures, technological developments and alternative routing developments, all of which affect our ability to gain or retain market share and revenues in the face of competition from existing and new market entrants;

- the effects of our customer acquisition and retention initiatives, particularly in the fixed-line voice telephony business, the mobile telecommunications business and our interconnection business;
- the effects of industry consolidation on the markets in which we operate, particularly with respect to our mobile and leased lines businesses;
- the success of new business, operating and financial initiatives, many of which involve substantial start-up costs and are untested, and of new systems and applications, particularly with regard to the integration of service offerings;
- our ability to achieve cost savings and realize productivity improvements, particularly with respect to our workforce-reduction initiatives, while at the same time enhancing customer service quality;
- our ability to retain and motivate key personnel;
- the impact of other significant strategic or business initiatives, including acquisitions, dispositions and business combinations;
- our ability to attract and retain qualified personnel, particularly in view of our cost reduction efforts;
- concerns over health risks associated with the use of wireless mobile devices and other health and safety risks related to radio frequency emissions;
- risks of infrastructure failures or damage due to external factors, including natural disasters, intentional wrongdoing, sabotage, acts of terrorism or similar events;
- the outcome of litigation, disputes and investigations in which we are involved or may become involved;
- risks and uncertainties relating to our international operations, including continued elevated levels of political uncertainty;
- risks and costs associated with integrating our acquired businesses and with selling or combining businesses or other assets;
- risks and uncertainties related to the development and implementation of our strategy;
- the progress of our domestic and international investments, joint ventures, partnerships and alliances, including the pending T-Mobile/Sprint merger;
- the effects of foreign exchange rate fluctuations, particularly in connection with subsidiaries operating outside the Eurozone;
- our ability to execute large-scale programs to reshape our information technology;
- instability and volatility in worldwide financial markets;
- the availability, terms and deployment of capital, particularly in view of our financing alternatives, actions of the rating agencies, developments in the banking sector and the impact of regulatory and competitive developments on our capital outlays; and
- the level of demand in the market for our debt obligations, and for the debt obligations of our subsidiaries and associated companies, and our shares, as well as for assets that we may decide to sell, which may affect our financing and acquisition strategies.

If these factors or other risks and uncertainties materialize, or if the assumptions underlying any of these statements prove incorrect, our actual performance and future actions may materially differ from those expressed or implied by forward-looking statements. We can offer no assurance that our estimates or expectations will be achieved or that we will be able to achieve our policy aims. When reviewing forward-looking statements contained in this document, investors and others should carefully consider the foregoing factors, as well as other uncertainties and events and their potential impact on our operations and businesses. You should refer to "*Risk Factors*" in this offering memorandum, for additional information on these and other risks and uncertainties.

LIMITATION ON ENFORCEMENT OF U.S. LAWS AGAINST THE GUARANTOR, THE ISSUER, THEIR MANAGEMENT AND OTHERS

Deutsche Telekom is a stock corporation (*Aktiengesellschaft*) organized under the laws of the Federal Republic of Germany, and Finance is a private company with limited liability for an unlimited duration, established under the laws of The Netherlands. The members of Deutsche Telekom's and Finance's respective supervisory and management boards are citizens or residents of countries other than the United States and their assets may be located outside the United States. As a result, you may not be able to effect service or process within the United States on such persons or upon Deutsche Telekom or Finance, or to enforce judgments of courts of the United States against them, whether or not predicated upon the civil liability provisions of the securities laws of the United States or any state or territory within the United States.

Under German law, a stock corporation may indemnify its employees, and, under certain circumstances, German labor law requires a stock corporation to do so. However, a stock corporation may not, as a general matter, indemnify members of the board of management or the supervisory board. Certain limited exceptions may apply if the indemnification is in the legitimate interest of the stock corporation. Deutsche Telekom's articles of incorporation do not contain provisions regarding the indemnification of its directors and officers. A German stock corporation may purchase directors' and officers' insurance. Deutsche Telekom has obtained liability insurance for members of its supervisory board (the "Supervisory Board") and its board of management (the "Board of Management") and certain of its officers. This includes insurance against liabilities under the Securities Act.

The laws of The Netherlands make no compulsory provision for the indemnification of members of the supervisory or management boards of a Dutch limited liability company. Finance's articles of incorporation do not contain provisions regarding the indemnification of its directors and officers. Deutsche Telekom has obtained liability insurance for members of Finance's supervisory board and its managing directors, including insurance against liabilities under the Securities Act.

The United States and Germany do not currently have a treaty providing for reciprocal recognition and enforcement of judgments in civil and commercial matters. In general, the enforcement of a final judgment of a United States court requires a declaration of enforceability by a German court in a special proceeding. Therefore, a final judgment for the payment of money rendered by a federal or state court in the United States based on civil liability, whether or not predicated solely upon United States federal securities laws, may not be enforceable, either in whole or in part, in Germany. In addition, awards of punitive damages in actions brought in the United States or elsewhere are likely to be unenforceable in Germany.

The United States and The Netherlands do not currently have a treaty or convention providing for reciprocal recognition and enforcement of judgments, other than arbitration awards, in civil and commercial matters. Accordingly, a judgment rendered by a court in the United States will not be automatically recognized and enforced by the Dutch courts. However, if the party in whose favor a judgment for the payment of money has been rendered by a competent court in the United States brings a new suit in a competent Dutch court, such party may submit to such court in The Netherlands the judgment which has been rendered in the United States. According to current practice, based on case law, the Dutch court may be expected to recognize, give res judicata effect to and render a judgment in accordance with the foreign judgment if and to the extent the following conditions are met: (i) it finds that the jurisdiction of the foreign court has been based on grounds which are internationally acceptable and that proper legal procedures have been observed, (ii) the foreign judgment is not in conflict with a decision rendered by a Dutch court between the same parties, nor with an earlier judgment rendered by a foreign court in proceedings involving the same cause of action and between the same parties, provided that the earlier decision can be recognized in The Netherlands, (iii) the foreign decision is — according to the law of its country of origin — formally capable of being enforced (*e.g.* is readily enforceable, has not been annulled in appeal or its enforceability has not been subject to a certain time frame) and except to the extent that the foreign judgment contravenes Dutch public policy.

SPECIAL NOTE ON NON-GAAP FINANCIAL MEASURES

In this offering memorandum, we have presented EBITDA, adjusted EBITDA, free cash flow, cash capex and net debt, which are non-GAAP financial measures. A non-GAAP financial measure is generally defined as one that purports to measure historical or future financial performance, financial position or cash flows but excludes or includes amounts that would not be so adjusted in the most comparable GAAP measure (which for these purposes we mean the most comparable measure presented in accordance with International Financial Reporting Standards, or IFRS, as adopted by the European Union). Our non-GAAP financial measures are not governed by IFRS and other companies may not compute these non-GAAP measures using the same method as Deutsche Telekom. Therefore, these measures may not be comparable with measures with the same or similar title that are reported by other companies.

The non-GAAP measures in this offering memorandum should not be viewed in isolation as an alternative to profit (loss) from operations, net profit (loss), net cash from operating activities, the financial liabilities reported in our consolidated balance sheet or other financial information presented in accordance with IFRS. We urge you to review the reconciliations of the non-GAAP measures to IFRS financial measures and other financial information contained in this offering memorandum. We also urge you not to rely on any single financial measure to evaluate our business but instead to form your view on our business with reference to our audited annual consolidated financial statements incorporated by reference in this offering memorandum and the other information we present in this offering memorandum.

EBITDA

We define EBITDA as profit (loss) from operations (EBIT) plus depreciation, amortization and impairment losses. We base our definition of EBITDA on profit (loss) from operations because this method of computation allows EBITDA to be derived in a uniform manner on the basis of a measure of earnings that is published for the operating segments and the Group as a whole. For a reconciliation of EBITDA to profit from operations, see "*Development of Our Business—Reconciliation of EBITDA and Adjusted EBITDA*".

Special Factors

EBITDA at the Group and segment levels was affected by a number of special factors relating to our operating activities in the reporting period as well as the prior-year periods. We believe that these special factors make it more difficult to compare EBITDA at the Group and segment levels with corresponding figures for prior periods. Adjustments are made irrespective of whether the relevant income and expenses are reported in profit (loss) from operations, profit (loss) from financial activities or income taxes.

We have grouped the special factors affecting EBITDA into the following five categories.

- Staff-related measures comprise expenses related to staff reduction initiatives or other programs to reduce headcount, including severance payments and early retirement.
- Non-staff-related restructuring comprises expenses relating to restructuring programs or other costs unrelated to our operations, such as costs associated with terminating contracts.
- Effects on earnings from business combinations and other transactions.
- Reversal of impairment losses.
- Other includes items that are unrelated to our operations.

Adjusted EBITDA

We define adjusted EBITDA as EBITDA excluding the effect of the special factors described above.

Our senior operating decision-makers use adjusted EBITDA as a performance indicator for managing our business activities, assessing our operating performance and measuring the performance of our operating segments. They believe that adjusted EBITDA permits them to better evaluate and compare developments over several reporting periods because the items excluded in calculating adjusted EBITDA have, in their view, little or no bearing on our underlying daily operating performance. However, adjusted EBITDA should be viewed in addition to, and not as a substitute for, the information prepared in accordance with IFRS that is contained in this offering memorandum. For a reconciliation of adjusted EBITDA to profit from operations, see "*Development of Our Business—Reconciliation of EBITDA and Adjusted EBITDA*".

Free Cash Flow (before dividend payments and spectrum investment)

We define free cash flow as net cash from operating activities:

- less net cash outflows for investments in intangible assets (excluding goodwill and before spectrum investment) and property, plant and equipment;
- plus proceeds from the disposal of intangible assets (excluding goodwill) and property, plant and equipment.

Our management uses free cash flow as an indication of the cash generating ability of our businesses and our ability to pay for discretionary and non-discretionary expenditures not included in the measure, such as payments pursuant to our shareholder remuneration policy, debt repayments or acquisitions. However, free cash flow should not be used to determine the financial position of the Group or considered as a substitute for any IFRS financial measure. You should not assume that free cash flow is freely available for discretionary application by management, since a number of expenditures not included in the measure are non-discretionary. For a reconciliation of free cash flow to net cash from operating activities, see "*Development of Our Business—Condensed Consolidated Statement of Cash Flows and Reconciliation of Free Cash Flow*".

Cash Capex

We define cash capex as net cash from investing activities, limited to cash outflows for investments in intangible assets (excluding goodwill) and property, plant and equipment. Our definition of cash capex generally includes spectrum investments. Nonetheless, for certain purposes, we exclude spectrum investments from cash capex, in which case we indicate the measure as "cash capex (before spectrum investment)" in this offering memorandum. In particular, cash capex (before spectrum investment) is relevant for cash outflows as a component of free cash flow. For a reconciliation of cash capex to net cash from investing activities, see Note 30 "*Notes to the Consolidated Statement of Cash Flows*" to each of our Consolidated Financial Statements, incorporated by reference in this offering memorandum.

Net Debt

We define net debt as total financial liabilities minus accrued interest, other liabilities, cash and cash equivalents, available-for-sale financial assets/financial assets held for trading, derivative financial assets, and other financial assets. Other financial assets include all cash collateral posted for negative fair values of derivatives as well as other interest-bearing financial assets. For a reconciliation of net debt to financial liabilities, see "*Development of Our Business—Financial Liabilities*".

EXCHANGE RATE INFORMATION

The following table shows, for the periods indicated, the average, high and low exchange rates for euros, expressed in U.S. dollars per EUR 1.00, as published by the European Central Bank:

Year or Month	Average	High	Low
		(in $ per €)	
2013	1.3281	1.3814	1.2768
2014	1.3285	1.3953	1.2141
2015	1.1095	1.2043	1.0552
2016	1.1069	1.1569	1.0364
2017	1.1297	1.2060	1.0385
December	1.1836	1.1993	1.1736
2018			
January	1.2200	1.2457	1.1932
February	1.2348	1.2493	1.2214
March	1.2336	1.2421	1.2171
April	1.2276	1.2388	1.2070
May	1.1558	1.2007	1.1812
June (through June 14, 2018	1.1751	1.1836	1.1669

On June 14, 2018, the exchange rate was USD 1.1730 per EUR 1.00.

SUMMARY

Deutsche Telekom

With approximately 168 million mobile customers, 28 million fixed-network and 19 million broadband lines (each as of December 31, 2017), we are one of the leading integrated telecommunications companies worldwide. We have an international focus and are represented in more than 50 countries. In the first quarter of 2018, we generated 66.6% of our net revenue, amounting to EUR 12.6 billion, outside of our home market of Germany.

We have organized our business activities into the following five operating segments:

- Germany, which comprises all fixed-network and mobile activities for consumers and business customers in Germany, and also provides wholesale telecommunications services for our Group's other operating segments;
- the United States, which comprises all mobile activities in the U.S. market conducted through our majority owned subsidiary T-Mobile US, Inc. ("T-Mobile US");
- Europe, which comprises:
  - all fixed-network and mobile operations in Greece, Romania, Hungary, Poland, the Czech Republic, Croatia, Slovakia, Austria (including UPC Austria), Albania, the F.Y.R.O. Macedonia, and Montenegro;
  - information and communication technology ("ICT") solutions for business customers in most of these countries;
  - our International Carrier Sales & Solutions unit, which mainly provides wholesale telecommunications services for our Group's other operating segments and for third parties;
- Systems Solutions 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; and
- Group Development, which actively manages and aims to increase the value of selected Group subsidiaries and equity investments.

Group units that cannot be allocated directly to one of the operating segments described above are reported in our Group Headquarters & Group Services segment, which comprises our sixth reportable segment.

Our registered address is Friedrich-Ebert-Allee 140, 53113 Bonn, Germany, and our telephone number is +49-228-181-0.

For more detailed information about our business, please refer to the sections entitled "*Description of Our Business and Operations*" and "*Development of Our Business*" in this offering memorandum.

Deutsche Telekom International Finance B.V.

We incorporated Finance in The Netherlands on October 30, 1995. Finance is our wholly owned subsidiary whose principal purpose is raising funds for us. Deutsche Telekom provides a full and unconditional guarantee for all liabilities issued by Deutsche Telekom International Finance B.V. The issued share capital of Finance amounts to EUR 500,000 and consists of 1,000 shares of common stock at a par value of EUR 500.

Finance's corporate seat and registered address is Stationsplein 8 K, 6221 BT Maastricht, The Netherlands, and its telephone number is +31-43-799-9050.

Our Risks and Challenges

Our business is subject to many material risks and challenges. For a detailed discussion of these risks as well as other considerations relevant to an investment in the Notes, see "*Risk Factors*" and other information included in the offering memorandum.

Our key risks and challenges include the following:

- ***Worldwide Economic Conditions:*** Recent moderate economic growth in Germany, Europe and the United States and uncertainties about prospects for future growth, including a further financial or debt crisis or a potential slowdown in consumer spending, could adversely affect our customers' purchases of our products and services in each of our operating segments, which could have a negative impact on our operating results and financial condition.

- ***Political Uncertainty:*** Continued elevated levels of political uncertainty could have unpredictable consequences for the markets in which we operate and for the greater economy, potentially leading to declines in business levels and losses across our businesses.

- ***Regulation and Other Government Intervention:*** We are subject to regulatory and legislative action by regulatory authorities, which may increase our costs of providing products or services, require us to change our business operations, products, or services or subject us to material adverse impacts if we fail to comply with such regulations.

- ***Spectrum:*** The scarcity and cost of additional wireless spectrum and regulations relating to spectrum use, may adversely affect our business strategy and financial condition and operating results.

- ***Competition:*** We face intense competition in all areas of our business, which could lead to reduced prices for our products and services and a decrease in market share in certain service areas, thereby adversely affecting our revenues and net profit.

- ***Business Combinations and Acquisitions:*** We are exposed to risks in connection with business combinations and acquisitions or dispositions of businesses and assets, which could jeopardize the achievement of our targets and materially harm our results of operations and our share price.

- ***Proposed T-Mobile US and Sprint Merger:*** We are exposed to risks in connection with the announced merger of T-Mobile US and Sprint. The conditions to the closing of the transaction may not be satisfied or our completion of the merger may be delayed. If the merger is completed, we may be unable to realize the synergies and other benefits we expect from it, and our financial condition, results of operations and share price could be adversely affected. The merger may also lead to downgrades in our credit ratings, which could adversely affect our and the combined company's respective businesses, cash flows, financial condition and operating results.

- ***Market Acceptance and Technological Change:*** We may not realize either the expected level of demand for our products and services, or the expected level or timing of revenues generated by those products and services, as a result of lack of market acceptance or technological change, which could adversely affect our cash flows and results of operations.

- ***Litigation:*** We are continuously involved in disputes and litigation with government agencies, competition authorities, competitors and other parties. The ultimate outcome of such legal proceedings is generally uncertain. When finally concluded, they may have a material adverse effect on our results of operations and financial condition.

- ***Cyber-security:*** If our efforts, or those of third party service providers, to maintain the privacy and security of our customer, confidential, or sensitive information are not successful at preventing a significant data breach or cyber-attack, we could incur substantial additional costs, become subject to litigation, enforcement actions or regulatory investigation, and suffer reputational damage.

Selected Financial Data

The following tables present selected consolidated financial and operating information. This selected consolidated financial and operating information should be read together with the section of this offering memorandum entitled "*Development of Our Business*", and our consolidated financial statements and the notes that are incorporated by reference in this offering memorandum.

This selected consolidated financial information is extracted or derived from our consolidated financial statements as of and for the year ended December 31, 2017 and 2016 (together, the "Consolidated Financial Statements") prepared in accordance with International Financial Reporting Standards as adopted by the EU ("IFRS") or from our condensed consolidated interim financial statements as of and for the three-month period ended March 31, 2018 prepared in accordance with IFRS applicable to interim financial reporting adopted by the EU (the "Condensed Consolidated Interim Financial Statements"). The Consolidated Financial Statements have been audited by PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft ("PwC"). The Condensed Consolidated Interim Financial Statements have been reviewed by PwC. The Consolidated Financial Statements and the Condensed Consolidated Interim Financial Statements are incorporated by reference in this offering memorandum.

	As of and for the three months ended March 31,		As of and for the year ended December 31,		
	2018[1]	2017	2017	2016	2015
	(billions of €, except as otherwise indicated)				
	(unaudited)		(audited, except as otherwise indicated)		
Income Statement Data					
Net revenue	17.9	18.6	74.9	73.1	69.2
Domestic (%)[2]	33.4	32.7	32.8	33.7	36.2
International (%)[2]	66.6	67.3	67.2	66.3	63.8
Profit from operations	2.2	2.8	9.4	9.2	7.0
Profit (loss) attributable to owners of the parent (net profit (loss))	1.0	0.7	3.5	2.7	3.3
Cash Flow Data					
Net cash from operating activities	4.3	4.4	17.2	15.5	15.0
Net cash used in investing activities	(3.6)	(3.5)	(16.8)	(13.6)	(15.0)
Net cash used in financing activities	(0.3)	(1.0)	(4.6)	(1.3)	(0.9)
Ratios and Selected Data					
Cash capex[3]	(3.1)	(3.3)	(19.5)	(13.6)	(14.6)
Number of employees averaged over the period (full-time employees excluding trainees) (thousands)[2]	216	217	216	221	226
Net revenue per employee (thousands of euro)[2, 4]	82.6	85.8	346.2	331.4	305.9
Earnings per share—basic and diluted (euro)[5]	0.21	0.16	0.74	0.58	0.71
Adjusted weighted average number of ordinary shares outstanding (basic) (millions)[6]	4,761	4,657	4,703	4,625	4,553
Total number of ordinary shares at the reporting date (millions)[2]	4,761	4,677	4,761	4,677	4,607
Dividend per share (euro)[7]	n.a.	n.a.	0.65[8]	0.60	0.55
Dividend per share (U.S. dollar)[2, 9]	n.a.	n.a.	0.78	0.63	0.60

n.a. – not applicable

1 The new accounting standards IFRS 15 "Revenue from Contracts with Customers" and IFRS 9 "Financial Instruments" took effect as of January 1, 2018. Prior-year figures were not adjusted. For more information, see "*Accounting Policies*" in the notes to our condensed consolidated interim financial statements as of and for the three-month period ended March 31, 2018, incorporated by reference in this offering memorandum.

2 Unaudited.

3 Cash outflows for investments in intangible assets and property, plant and equipment in accordance with the statement of cash flows.

4 Calculated on the basis of the average number of employees for the year, excluding trainees, apprentices and student interns.

5 Basic earnings per share is based on the time-weighted number of all ordinary shares outstanding.

6 Adjusted weighted average number of ordinary shares outstanding is determined by deducting the weighted average number of treasury shares held by Deutsche Telekom from the total number of ordinary shares outstanding.

7 Dividends per share are presented on the basis of the year in respect of which they are declared, not the year in which they are paid.

8 The proposal, as of December 31, 2017, was approved by the annual shareholders' meeting in May 2018.

9 Dividend amounts have been translated into U.S. dollars (using exchange rates published by the European Central Bank) using the applicable rate on December 31 for each of the years indicated. As a result, the actual U.S. dollar amount at the time of payment may vary from the amount shown here.

	As of March 31,	As of December 31,		
	2018	2017	2016	2015
	(billions of €)			
	(unaudited)	(audited)		
Data from the Statement of Financial Position				
Total assets	138.0	141.3	148.5	143.9
Total financial liabilities	57.7	57.5	64.7	62.4
Shareholders' equity	43.7	42.5	38.8	38.2

The following tables present information concerning the contribution of our reportable segments – comprising our Germany, United States, Europe, System Solutions and Group Development operating segments, and our non-operating Group Headquarters & Group Services segment – to net revenue for the periods indicated.

	Q1 2018	Q1 2017	Change	
	(millions of €)			(%)
	(unaudited)			
Net revenue[1]	**17,924**	**18,646**	**(722)**	**(3.9)**
Germany[2]	5,325	5,397	(72)	(1.3)
United States	8,455	8,982	(527)	(5.9)
Europe	2,811	2,781	30	1.1
Systems Solutions	1,665	1,704	(39)	(2.3)
Group Development	528	595	(67)	(11.3)
Group Headquarters & Group Services[2]	651	735	(84)	(11.4)
Intersegment revenue	(1,511)	(1,547)	36	2.3

1 The net revenue figures presented above for the first three months of the 2018 and 2017 financial years correspond to the figures presented in the column under the heading "Total revenue" in the table "*Segment information in the first quarter*" contained in the section "*Other Disclosures—Segment Reporting*" in the condensed consolidated interim financial statements as of and for the three-month period ended March 31, 2018, incorporated by reference in this offering memorandum, with the segment revenue figures presenting revenue of the respective segments prior to the elimination of intersegment revenue.

2 We assigned Vivento Customer Services GmbH, a provider of call center services, to our Germany operating segment as of January 1, 2018; previously it was part of our Group Headquarters & Group Services segment. Comparative figures have been adjusted retrospectively.

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

1 Adjusted retrospectively to reflect our reportable segments for the 2017 financial year (as reflected in our consolidated financial statements as of and for the year ended December 31, 2017). The figures therefore differ to the figures for the 2016 and 2015 financial years that are included in the discussions of the developments in the 2016 financial year under "*Development of Business in the Operating Segments*" below. For further information, see "*Factors Affecting the Comparability of Results—Changes in Reportable Segments*".

2 The net revenue figures presented above for the 2017, 2016 and 2015 financial years correspond to the figures presented in the column under the heading "Total revenue" in the table contained in Note 31 "*Segment Reporting*" to our consolidated financial statements as of and for the year ended December 31, 2017 incorporated by reference in this offering memorandum, with the segment revenue figures presenting revenue of the respective segments prior to the elimination of intersegment revenue.

3 Since January 1, 2017, we have included in our segment reporting the Group Development operating segment and, within the Group Headquarters & Group Services segment, the Board of Management department Technology and Innovation. Comparative figures for the 2016 and 2015 financial years have been adjusted retrospectively. For further information, see "*Factors Affecting the Comparability of Results—Changes in Reportable Segments*".

The Offering

The following summary contains basic information about the Notes and is not intended to be complete. It does not contain all of the information that is important to you. For a more complete understanding of the Notes, please refer to the section of this offering memorandum entitled "Description of the Notes and Guarantees".

Notes Offered .... $1,200,000,000 aggregate principal amount of 4.375% Notes due June 21, 2028.
$550,000,000 aggregate principal amount of 4.750% Notes due June 21, 2038.

Issuer .... Deutsche Telekom International Finance B.V.

Guarantee .... Deutsche Telekom will unconditionally and irrevocably guarantee to each holder of the Notes the due and punctual payment of the principal and interest relating to the Notes including any additional amounts described below. Each Guarantee will be a direct unsubordinated unsecured obligation of Deutsche Telekom. The Guarantee is described under "*Description of the Notes and Guarantees—Guarantees*".

Fiscal and Paying Agency Agreement .... The Notes will be issued under a fiscal and paying agency agreement (the "Agreement"), among Deutsche Telekom, Finance and Citibank as fiscal agent. The Agreement is more fully described under "*Description of the Notes and Guarantees*".

Date Interest Starts Accruing .... June 21, 2018.

Issue Prices .... 99.552% of the principal amount of the 2028 Notes.
99.349% of the principal amount of the 2038 Notes.

Maturity Dates .... June 21, 2028 for the 2028 Notes.
June 21, 2038 for the 2038 Notes.

Interest Rates .... 4.375% per annum for the 2028 Notes.
4.750% per annum for the 2038 Notes.

Interest Payment Dates....................... Every June 21 and December 21, commencing on December 21, 2018.

If any payment with respect to the Notes is due on a day that is not a Business Day (as defined below), we will make the required payment on the next succeeding Business Day, and no additional interest will accrue in respect of the payment made on that next succeeding Business Day.

Additional Amounts .... The Issuer or the Guarantor may be required to withhold amounts from payments on the principal or interest on the Notes or any amounts to be paid under the Guarantees, as the case may be, for taxes or any other governmental charges. If Germany or The Netherlands requires a withholding of this type, the Issuer or the Guarantor, as the case may be, will, subject to some exceptions (as more fully described below under "*Description of the Notes and Guarantees—Additional Amounts*"), pay Additional Amounts in respect of those payments of principal and interest so that the amount you receive after such taxes and governmental charges will equal the amount that you would have received if no such taxes and governmental charges had been applicable.

Optional Redemption.... The Issuer may redeem any series of Notes, in whole or in part, under the circumstances described in "*Description of the Notes and Guarantees—Optional Redemption*".

The Issuer will give notice to DTC of any redemption it proposes to make at least 30 days, but not more than 60 days, before the redemption date. Notice by DTC to participating institutions and by these participants to street name holders of indirect interests in the series of debt securities will be made according to arrangements among them and may be subject to statutory or regulatory requirements.

Optional Tax

Redemption	In the event of various tax law changes after the date of this offering memorandum and other limited circumstances that would require the Issuer or the Guarantor to pay Additional Amounts or deduct or withhold tax on any payment to the Issuer to enable the Issuer to make any payments in relation to the Notes, subject to certain exceptions, the Issuer (or, if applicable, the Guarantor) may redeem the Notes at any time at its option, as a whole or in part, upon not less than 30 nor more than 60 days' prior notice, at a redemption price equal to 100% of the principal amount of the notes then outstanding plus accrued and unpaid interest (and all Additional Amounts, if any) to (but excluding) the redemption date.
Limitation on Liens	So long as any of the Notes remain outstanding, neither the Issuer nor the Guarantor may become obligated on any present or future Capital Market Indebtedness (as defined under "*Description of the Notes and Guarantees—Limitation on liens*") that is secured by a lien on the whole or any part of its present or future assets, unless an equivalent or higher-ranking lien on the same property is granted to the holders of the Notes.
Substitution of Issuer; Consolidation, Merger and Sale of Assets	Each of the Issuer and the Guarantor, without the consent of the holders of the Notes, is generally permitted to consolidate or merge into, or sell, transfer, lease or convey all or substantially all of their respective assets to, any corporation and the Issuer may at any time substitute for the Issuer either the Guarantor or any Subsidiary (as defined under "*Description of the Notes and Guarantees—Substitution of Issuer; Consolidation, Merger and Sale of Assets*") of the Guarantor as principal debtor under the Notes, under the circumstances described in "*Description of the Notes and Guarantees— Substitution of Issuer; Consolidation, Merger and Sale of Assets*".
Cross-Default	None.
Calculation of Interest	Interest on the Notes will be calculated on the basis of a 360-day year consisting of twelve 30-day months.
Business Day	A "Business Day" means a day (other than a Saturday or Sunday) on which commercial banks are open for business (including dealings in foreign exchange and foreign currency) in New York City.

Securities Codes

	2028 Notes	2038 Notes
CUSIP (Rule 144A):	25156PBB8	25156PBC6
CUSIP (Regulation S):	N2557FFL3	N2557FFM1
ISIN (Rule 144A):	US25156PBB85	US25156PBC68
ISIN (Regulation S):	USN2557FFL33	USN2557FFM16
Common Code (Rule 144A):	184328453	184329115
Common Code (Regulation S):	184328534	184340631

Denomination	Minimum denominations of $150,000 and integral multiples of $1,000 in excess thereof.
Regular Record Dates For Interest	The Business Day immediately preceding the relevant interest payment date.
Defeasance	The Notes are subject to the provisions on defeasance that are described under "*Description of the Notes and Guarantees—Discharge and Defeasance*" and "*Description of the Notes and Guarantees—Covenant Defeasance*".
Ranking	The Notes and Guarantees are not secured by any property or assets of Finance or Deutsche Telekom and will rank equally with all of their respective other unsecured and unsubordinated indebtedness.
Form of the Notes	The Notes will initially be issued to investors in book-entry form only. Fully-registered Global Notes (as defined herein) representing the total aggregate principal amount of the Notes will be issued and registered in the name of a nominee for DTC, the securities depositary for the Notes, for credit to accounts of direct or indirect participants in DTC, including Euroclear and

Clearstream. Unless and until Notes in definitive certificated form are issued, the only Holder will be Cede & Co., as nominee of DTC, or the nominee of a successor depositary. Except as described in this offering memorandum, a beneficial owner of any interest in a Global Note will not be entitled to receive physical delivery of definitive Notes. Accordingly, each beneficial owner of any interest in a global Note must rely on the procedures of DTC, Euroclear, Clearstream, or their participants, as applicable, to exercise any rights under the Notes.

Governing Law .... The Notes, the Guarantees and the Agreement will be governed by, and construed in accordance with, the laws of the State of New York.

Additional Issues.......... The Issuer may, from time to time, without notice to or the consent of the Holders, create and issue additional notes, maturing on the same maturity date and having the same terms and conditions as the previously outstanding Notes of that series (the 2028 Notes or the 2038 Notes) in all respects (or in all respects except for the issue date and the amount and the date of the first payment of interest thereon) in accordance with applicable laws and regulations and pursuant to the Agreement (including with respect to the Guarantor and the Guarantees). Additional Notes issued in this manner shall be consolidated with and form a single series with previously outstanding Notes. Any Additional Notes shall be issued under a separate CUSIP or ISIN number unless the Additional Notes are issued pursuant to a "qualified reopening" of the original series or are otherwise treated as part of the same "issue" of debt instruments as the original series for U.S. federal income tax purposes.

Fiscal Agent, Paying Agent, Transfer Agent and Registrar .... Citibank, N.A.

Notices........................... So long as any Notes are represented by a global note and such global note is held on behalf of a clearing system, notices to the holders of Notes may be given by delivery of the relevant notice to that clearing system for communication by it to entitled accountholders or, if any such delivery is not practicable, by publication in a leading English language daily newspaper having general circulation in Europe. Any such notice will be deemed to have been given on the date of first publication or, if published more than once or on different dates, on the first date on which publication is made.

Listing and Admission to Trading.................. The Notes will not be listed on any securities exchange.

RISK FACTORS

Before deciding to purchase the Notes, prospective investors should carefully review and consider the following risk factors and the other information contained in this offering memorandum, in particular the information contained in "Legal Proceedings". The occurrence of one or more of these risks alone or in combination with other circumstances may have a material adverse effect on our business, results of operations, financial condition and cash flows, and may affect our ability to fulfill our obligations under the Notes and the Guarantees. The order in which the risks are presented does not reflect the likelihood of their occurrence or the magnitude or significance of the individual risks. Investing in the Notes could involve additional risks and uncertainties of which we may not currently be aware, or which we may currently not consider material. An investment in the Notes is only suitable for investors experienced in financial matters who are in a position to fully assess the risks relating to such an investment and who have sufficient financial means to absorb any potential loss stemming therefrom. The following discussion contains a number of forward-looking statements. Please refer to the "Forward-Looking Statements" discussion in this offering memorandum for cautionary information.

Risks Related to our Business

Uncertainties about economic growth in Germany, Europe and the United States and prospects for growth going forward, including potential slowdowns in consumer spending, could adversely affect our customers' purchases of our products and services in each of our operating segments, which could have a negative impact on our operating results and financial condition.

Our business is influenced by general economic conditions in our core markets of Germany, Europe and the United States. We remain subject to the risk of a protracted period of low or negligible global growth as recent economic and political developments have raised questions once again concerning the economic situation going forward. In Europe, potential future changes to monetary policy, renewed doubts about the future of the Eurozone with recent developments in Italy (as well as questions about the EU more generally in light of the continuing economic uncertainty since the Brexit vote in June 2016), insufficient deleveraging in the private and public sectors, continued doubts over the pace of structural and financial reforms and an elevated level of political uncertainty could adversely affect our operations. In some of the European countries in which we operate, such as Greece and Croatia, structural unemployment remained unabatedly high, especially among older persons of working age. In the United States, where we have experienced a large portion of our revenue growth in recent periods, economic data have been strong prompting the Federal Reserve to embark on a course of raising interest rates. Should an economic contraction or a protracted period of stagnation occur, monetary policymakers in Europe and the United States have few tools left to combat these developments. Economic weakness, especially in the emerging economies but also in Europe, could negatively impact global trade and the markets of our operating segments. These trends could also be exacerbated by geopolitical crises, resulting for example, from the rising intercontinental trade tensions, terrorist attacks, continued instability in the Middle East or increased political uncertainty arising from the success of populist movements in European countries.

In particular, this situation poses risks to our operations in some of our core countries. For example, consumers and business customers could increasingly curtail their consumption of our services in an atmosphere of continued economic distress and continued or increasing uncertainty. National austerity measures in response to declining economic output could also have further negative effects on telecommunications consumption, caused by both reduced government demand and declines in disposable income in the private sector. Our operating business also faces the risks of unannounced tax increases or special taxes, particularly in our Southern and Eastern European markets. These developments could, in turn, negatively impact our revenue and earnings development, including in the future growth areas (such as connected car and healthcare, as well as in cutting-edge digital innovation areas such as cloud computing and cyber security) on which we plan to focus, and jeopardize the attainment of our growth targets, such as those relating to data services in mobile telecommunications, or those relating to broadband products and services.

Continued elevated levels of political and economic uncertainty could have unpredictable consequences for the markets in which we operate and for the greater economy, potentially leading to declines in business levels and losses across our businesses.

The last several years have been characterized by increased political and economic uncertainty as Europe in particular has been impacted by the European sovereign debt crisis, the outcomes of the referenda in the UK on EU membership, the refugee crisis and the increasing attractiveness to voters of populist movements. Although the severity of the European debt crisis appeared to have abated somewhat over recent years as the actions by the European Central Bank, the rescue packages and the economic recovery appeared to have stabilized the situation in Europe, political uncertainty has continued to be at an elevated level in recent periods and could trigger the unwinding of aspects of European integration that have benefitted our businesses. In many European countries, populist or anti-austerity political parties or movements have garnered increased popular support. In particular, the United Kingdom's upcoming exit from the EU or any potential similar attempts by other EU countries could, depending on political situation surrounding such an exit, adversely affect European and global economic or market conditions. Against this backdrop, the prospects for national structural reform and further integration among EU member states, both viewed as important tools to reduce the Eurozone's vulnerabilities to future crises, appear to have worsened. Furthermore, overall high global economic growth rates could be impacted by rising political uncertainties surrounding international trade and international relations, which poses a substantial risk for the global economy. These trends may ultimately result in material reductions in our business levels as our customers rein in their spending in light of decreased economic output and increased uncertainty, which would materially adversely affect our operating results and financial condition.

We are exposed to risks in connection with business combinations and acquisitions or dispositions of businesses and assets, which could jeopardize the achievement of our targets and materially harm our results of operations and our share price.

Where it appears strategically advantageous, we may consider business combinations, acquisitions or disposals of businesses or assets from time to time. We have announced mergers in Austria (with UPC) and in the Netherlands (with Tele2) which are currently subject to review by the European Commission. Our subsidiary T-Mobile US recently announced a business combination with Sprint Corporation ("Sprint"), a large telecommunications provider in the United States, (the "Transactions"). The completion of the Transactions is subject to significant conditions (including approval by antitrust and other regulatory bodies including the Department of Justice) and the Transactions expose us to significant risks (see "*Risk Factors Related to the Proposed T-Mobile US and Sprint Merger*"). Even though we review the companies, businesses, assets, liabilities or contracts we plan to acquire, it is generally not feasible for these reviews to be complete in all respects. As a result, we may assume unanticipated liabilities, an acquisition may not perform as well as expected. Were we to announce or complete a significant business combination transaction, our share price could decline significantly if investors viewed the transaction as too costly or unlikely to improve our competitive position. In addition, we might have difficulty successfully integrating any entity with which we combine our operations, for example due to unexpectedly high integration costs, which could jeopardize the achievement of qualitative or quantitative targets, including those relating to cost and revenue synergies, and could materially and adversely affect our profitability. Failure to complete announced business combinations, acquisitions or dispositions could also affect investors' perception of our business prospects and management, and thus cause our share price to fall. It could also lead to departures of key employees, or lead to increased costs and reduced profitability if we felt compelled to offer them financial incentives to remain. Furthermore, the rating of Deutsche Telekom is likely to be negatively affected by consummation of the Transactions. Additionally, the evolving wireless industry is increasingly characterized by convergence of mobile, video and broadband services. The opportunities for the acquisition of non-wireless assets in the United States, poses several challenges relating to the integration of such assets into our processes and systems, such as sales and service and back office support.

We are subject to regulatory and legislative action by regulatory authorities, which may increase our costs of providing products or services, require us to change our business operations, products, or services or subject us to material adverse impacts if we fail to comply with such regulations.

Our operations worldwide, as well as those of our subsidiaries and affiliates, are subject to sector-specific telecommunications regulations and general competition law, as well as a variety of other regulations. The extent to which telecommunications regulations apply to us depends largely on the nature of our activities in a particular country, with the provision of traditional fixed-line telephony services usually being subject to the most extensive regulation. Regulations can have a very direct and material effect on our overall business, particularly in jurisdictions that favor regulatory intervention.

These regulatory authorities, including the European Commission, the German Federal Network Agency (*Bundesnetzagentur*), the U.S. Federal Communications Commission ("FCC") and other authorities, regulate the licensing, construction, modification, operation, ownership, sale and interconnection of fixed-line and wireless network communications systems. They also have the authority to assign wireless spectrum (often in cooperation with the relevant ministry or government department) to supervise the efficient use of frequencies, and to impose universal service obligations. We are subject to regulatory oversight by various regulatory authorities in a number of jurisdictions, as well as judicial review and actions, on issues related to the telecommunications industry that include, but are not limited to: network access, including bitstream access, very high-speed digital subscriber line ("VDSL") and vectoring; traffic management; regulation of charges, such as monthly line rental, termination rates and roaming rates; spectrum allocation and licensing; pole attachments; inter-carrier compensation; Universal Service Fund ("USF"); net neutrality; special access; emergency dialing services; electromagnetic environmental compatibility; consumer protection; consumer privacy and cyber security. We are also subject to regulations in connection with other aspects of our business, including handset financing and insurance activities. Recent initiatives by the FCC, the European Commission, the German Federal Network Agency and other regulatory authorities suggest that the regulatory framework in which we operate remains in flux and that we will continue to have to adjust to a constantly changing regulatory environment.

The regulatory authorities having jurisdiction over our activities may adopt regulations or take enforcement or other actions that could adversely affect our business, impose new costs, or require changes in current or planned operations. Furthermore, we could be subject to fines, forfeitures and other penalties (including, in extreme cases, the revocation of our spectrum and other licenses) for failure to comply with governmental regulations, even if any such non-compliance was unintentional. The loss of any licenses, or any related fines or forfeitures, could adversely affect our business, results of operations and financial condition.

For further information regarding the matters discussed in this section and other aspects of the regulatory environments to which our businesses are subject, see "*Regulation*".

Europe

Throughout the EU, national telecommunications laws are based on the Regulatory Framework for Electronic Communications in the EU ("EU Framework"). Since the largest part of our business is undertaken in the EU, our operations are, to a large extent, subject to the EU Framework and related telecommunications regulations. The most significant regulatory impact on our business comes from the EU Framework's special requirements applicable to providers with significant market power. Obligations in relation to network access, price setting, separate accounting for interconnection services, publication and non-discrimination, can be imposed on those operators that are designated by the relevant national regulatory authority ("NRA") as having significant market power in an electronic communications market (see "*Regulation—The EU Regulatory Framework for Electronic Communications—Special Requirements Applicable to Providers with Significant Market Power*"). A review of the EU Framework for telecommunications regulation that is expected to enter into force in EU Member States in late 2020 confirms these basic principles, while foreseeing certain options for a more light-touch regulatory regime for fibre-to-the home networks (see *"Regulation—The EU Regulatory Framework for Electronic Communications"* for details of the new rules). The revised framework will provide new powers for regulators to impose network access irrespective of significant market power under certain economic conditions such as the presence of high and non-transitory entry barriers, This could lead to situations in which deregulation of our networks is delayed or impeded in cases where we are no longer deemed to have significant market power. At the same time, the new intervention powers may be beneficial in case we want to make use of regulated network access to third party networks to provide our services. Under the Digital Single Market strategy, European Parliament and Council are beginning to debate on a draft regulation for increased transparency of certain online intermediaries including easier possibilities for redress against them. The draft of this 'platform-to-business' regulation was published by the European Commission on April 25, 2018. The Commission proposal is limited in scope and foresees only light-touch obligations. Changes to the proposal by the European Parliament and Council could, however, lead to additional requirements for some of our media distribution platforms or platform solutions in the mobile-to-mobile ("M2M") space. This could, inter alia, result in additional costs due to technical implementation measures needed to comply with increased regulation.

The European Commission has published two Directive proposals to update and improve consumer protection and its enforcement. Different from the EU Telecommunications Framework, the Directives apply horizontally, *i.e.* to all sectors of industry. Also, the provisions include the risk of being more burdensome for telecommunications operators. For example, Member States under the proposal will be empowered to more easily restrict or ban unsolicited visits at customers' homes, potentially affecting our operators' sales channels. Further, certain elements of the proposal on collective redress could lead to automatic imposition of penalties and compensation in cases of identified breaches of consumer law. The European Parliament and Member States aim at adopting both Directives by spring 2019.

In addition, we expect the new regulation on roaming charges and mobile call termination charges described below to have a negative effect on our revenues and our ability to invest in mobile networks.

On November 25, 2015, the EU Parliament and the Council adopted Regulation (EU) 2015/2120 concerning the single market for electronic communications, which contains provisions on the open internet access ("net neutrality"), international roaming and end-user protection, including transparency obligations. With regard to international roaming, Regulation (EU) 2015/2120, which took effect on April 30, 2016, provides for an initial reduction of roaming rates to the level of national rates plus a strictly limited surcharge. As of June 15, 2017, surcharges for roaming services within the EU were eliminated entirely (commonly known as "Roam like at Home"), unless permitted under implementing rules on fair usage policy, which were published by the European Commission on December 15, 2016. The European Council and the European Parliament are expected to approve further rules on wholesale roaming regulation on or prior to June 15, 2017. Such further wholesale roaming regulation could increase risks of arbitrage-based business models based on international roaming. The introduction of Roam like at Home will have a corresponding negative effect on our revenues and will result in substantial implementation costs. On June 15, 2016, the European Commission published its legislative proposal for the future regulation of inter-operator tariffs ("IOTs"), which network operators charge to other network operators when their roaming customers use the other operator's network. It proposes substantial cuts in the regulated wholesale roaming rates for data, as well as more moderate cuts for the prices of voice and SMS wholesale roaming services. In reviewing the European Commission's proposals, the European Parliament and the Council have proposed further cuts. A general reduction in regulated IOTs would also give rise to arbitrage risks — *i.e.*, risks from the misuse of the international roaming mechanism to circumvent national terms and conditions — for us and our international subsidiaries.

In addition, we expect various reviews of, and legislative initiatives and court proceedings pertaining to, call termination rates, which will likely result in further reductions of the mobile call termination fees that we may charge in the EU countries in which we operate.

Germany

German telecommunications regulation has a particularly significant impact on our business due to the significant share of our operations that is based or conducted in Germany. German telecommunications regulation is based on the EU Framework, as in all EU Member States, and is mainly derived from the German Telecommunications Act (*Telekommunikationsgesetz*) and implemented by the Federal Network Agency (*Bundesnetzagentur*).

We believe that, for the foreseeable future, the Federal Network Agency is likely to view us as a provider with significant market power in the fixed network and in other markets, including most of those in which we held monopoly rights in the past. Additionally, we have been determined to be a provider with significant market power in the German market for mobile voice call termination. There is a significant risk that the strict regulatory provisions of the German Telecommunications Act relating to providers deemed to have significant market power will continue to be applied in the future to our activities in the markets described above. Considering that in many markets our competitors are unlikely to gain significant market power in the near future, we expect that we will have to compete in important markets with providers not subject to those regulatory obligations. Therefore, these competitors may have more flexibility than we have in terms of the selection of services offered and customers served, pricing and the granting of network access. In addition, the national transparency regulation announced in December 2016 to achieve more transparency and greater cost control in telecommunications services also materially affects our operations in Germany. The extensive requirements provide consumers and other end users with the opportunity, for example, to check their Internet speeds in the mobile and fixed networks upon request. These new regulations are leading to a substantial increase in costs for our operations in Germany.

Additionally, the German Federal Ministry for Justice and Consumer Protection presented a draft declaration (Musterfeststellungsklage) which would provide consumers a means of collective redress. This may increase the occurrence of legal actions brought by entitled parties, e.g. consumer protection agencies.

In addition to the regulatory risks described above, there are also uncertainties in Germany arising from the fact that administrative courts can reverse rate rulings made by the Federal Network Agency. In such cases, the Federal Network Agency must then make a decision again with respect to the rates for past periods. It is generally unclear in such cases whether, to what extent and in which direction rates will be ultimately revised. Nevertheless the Federal Network Agency has recently, in May 2018, made a decision regarding unbundled local loop one-time fees after a court had dismissed the original decision, in which wholesale rates increased retroactively.

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 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 have filed an appeal against the ruling and are seeking legal remedy with the Cologne Administrative Court. Costs of such products would further increase if a court decided that we are not allowed to restrict optional offers only to be used in Germany (see "*Regulation— Mobile Regulation— Germany"*).

United States

Under the Obama administration, the FCC established new net neutrality and privacy regimes that applied to our operations. Both sets of rules potentially subjected some of our initiatives and practices to more burdensome requirements and heightened scrutiny by federal and state regulators, the public, edge providers and private litigants regarding whether such initiatives or practices are compliant. While the FCC rules have now largely been rolled back under the Trump administration, some state legislators and regulators are seeking to replace them with state laws, perpetuating uncertainty regarding the regulatory environment around these issues. Additionally, the new rules relating to net neutrality are being challenged in court.

The Federal Trade Commission ("FTC") and other federal agencies have asserted that they have jurisdiction over some consumer protection and elimination and prevention of anticompetitive business practices with respect to the provision of non-common carrier services. We cannot assure you that the FCC, FTC, or any other federal, state or local agencies will not adopt regulations or take other enforcement or other actions that would adversely affect T-Mobile US's business, impose new costs, or require changes in current or planned operations. States are also increasingly focused on the quality of service and support that wireless communication providers provide to their customers and several states have proposed or enacted new and potentially burdensome regulations in this area. A number of state Public Utility Commissions and state legislatures have introduced proposals in recent years seeking to regulate carriers' business practices. T-Mobile US also faces potential investigations by, and inquiries from or actions by state Public Utility Commissions and state Attorneys General. We also cannot assure you that the U.S. Congress will not amend the Communications Act, from which the FCC obtains its authority and which serves to limit state authority, or enact other legislation in a manner that could be adverse to T-Mobile US's business. Enactment of additional state or federal regulations may increase T-Mobile US's costs of providing services (including, through universal service programs, requiring us to subsidize wireline competitors) or require us to change T-Mobile US's services. Failure to comply with applicable regulations could have a material adverse effect on T-Mobile US's business, financial condition and results of operations.

Moreover, the offering of financial services products by T-Mobile US to its customers, such as financing of devices, including through its Equipment Installment Plan and JUMP! On Demand program, has expanded T-Mobile US's regulatory compliance obligations. If it fails to remain compliant with any such financial services or consumer protection regulations, then it faces the risk of:

- Increased consumer complaints and potential examinations or enforcement actions by federal and state regulatory agencies, including but not limited to the Consumer Financial Protection Board, Federal Deposit Insurance Corporation and the FTC; and

- Regulatory fines, penalties, enforcement actions, civil litigation and/or class action lawsuits.

The scarcity and cost of additional wireless spectrum and regulations relating to spectrum use, may adversely affect our business strategy and financial condition and operating results.

We will need to acquire additional spectrum in order to continue our customer growth, expand and deepen our coverage, maintain our quality of service, meet increasing customer demands and deploy new technologies. We will be at a competitive disadvantage and possibly experience erosion in the quality of service in certain markets if we fail to gain access to necessary spectrum before reaching network capacity, especially low band spectrum and spectrum in the harmonized bands for 5G. As a result, we are actively seeking to make additional investments in spectrum in several European markets where NRA's are currently preparing the sale of spectrum. This is relevant as well for the United States, as the FCC published its intention to sell additional important spectrum resources.

The continued interest in, and acquisition of, spectrum may reduce our ability to acquire spectrum from other carriers or otherwise, or negatively impact our ability to gain access to spectrum through other means, including government auctions. We may need to enter into spectrum sharing or leasing arrangements, which are subject to certain risks and uncertainties and may involve significant expenditures.

In the United States, gaining access to the spectrum we won in the FCC 600 MHz auction in 2017 may take up to three years or more. Any material delay could adversely impact our ability to implement our plans and efforts to improve our network. In addition, our return on investment in spectrum depends on our ability to attract additional customers and to provide additional service and usage to existing customers. As a result, the return on any investment in spectrum that we make may not be as much as we anticipate or take longer than expected. Additionally, we may be unable to secure the spectrum we need in the upcoming auctions, or in any other government auction we may elect to participate in, on favorable terms or at all.

The various NRAs having jurisdiction over our operations in the countries in which we provide wireless services may impose conditions on the use of new wireless broadband mobile spectrum, including new restrictions or rules governing the use or access to current or future spectrum. This could increase pressure on capacity and may negatively impact our ability to obtain spectrum economically or in appropriate configurations or coverage areas. Additional conditions that may be imposed by NRAs include increased coverage requirements, limited license terms or renewal rights, clearing and wholesale obligations, network access or net neutrality requirements that may make it less attractive or less economical to acquire spectrum. In addition, rules may be established for future government spectrum auctions that may negatively impact our ability to obtain spectrum economically or at all or in appropriate configurations or coverage areas.

If we cannot acquire the additional spectrum needed for our business either from the government or otherwise, if competitors acquire spectrum that will allow them to provide services competitive with our services, or if we cannot deploy services over acquired spectrum on a timely basis without burdensome conditions, at reasonable cost, and while maintaining network quality levels, then our ability to attract and retain customers and our associated financial condition and operating results could be materially adversely affected.

Our fixed-line and wireless network authorizations and licenses are subject to renewal and may be revoked in the event that we violate applicable laws.

Our existing fixed-line and wireless authorizations and licenses are subject to renewal upon the expiration of the relevant periods for which they are granted. While historically regulatory authorities have approved our authorization and license renewal applications, the applicable legal frameworks provide that authorizations or licenses may be revoked for cause and authorization and license renewal applications denied if the competent regulatory authorities determine that a renewal would not serve the public interest. In addition, our authorizations and licenses are subject to our compliance with applicable legal requirements, and in particular in the United States, are subject to our compliance with the terms set forth in the agreement pertaining to national security among Deutsche Telekom, the Federal Bureau of Investigation, the Department of Justice, the Department of Homeland Security and T-Mobile US. Our failure to comply with the legal requirements applicable to us or our subsidiaries, or the agreement described above could result in fines, injunctions and other penalties, including potential revocation or non-renewal of our spectrum and other authorizations or licenses. If we fail to timely file to renew any authorization or license, or fail to meet any regulatory requirements for renewal we could be denied a license renewal. In Germany, for example, the Federal Network Agency awards spectrum for wireless network services for certain predetermined periods of time, subject to renewal. One-time and regular rates charged by telecommunications services providers to their customers or competitors are also approved only for certain pre-determined periods of time, subject to re-examination after the expiration of that period. In the United States, many of our wireless licenses are subject to interim or final construction requirements and there is no guarantee that the FCC will find our construction, or the construction of prior licensees, sufficient to meet the build-out or renewal requirements. The FCC has pending a rulemaking proceeding to reevaluate, among other things, its wireless license renewal showings and standards and may in this or other proceedings promulgate changes or additional substantial requirements or conditions to its renewal rules, including revising license build out requirements in unbuilt areas. Accordingly, we cannot assure you that the competent regulatory authorities will renew our licenses upon their expiration. If any of our licenses were to be revoked or not renewed upon expiration, we would not be permitted to provide services under that license, which could have a material adverse effect on our business, results of operations and financial condition.

We face intense competition in all areas of our business, which could lead to reduced prices for our products and services and a decrease in market share in certain service areas, thereby adversely affecting our revenues and net profit.

Germany

In Germany, fixed-line network voice telephony service revenues and prices have continued to decline, primarily due to intense competition and adverse decisions imposed by the NRAs. The market for fixed-network broadband is characterized by a large number of competitors and different infrastructures, and we have observed increasing shares of cable network operators, which are able to provide telecommunications services. In the broadband market, we also observe that the market shares of regional network operators are growing, in particular in Germany, and that they are increasing their market coverage by building out their own infrastructure. In certain regions, our competitors are extending their own fiber-optic network to homes so that they are independent of our network in the local loop. For example, the announced business combination between Vodafone Germany and Unity Media will create a de-facto-monopoly on cable TV markets. The increased market power of the merged entity could negatively affect the market conditions for competitors in Germany.

Competitive pressure is also increasing from competitors that have traditionally operated outside the telecommunications sector, such as major consumer electronics companies and Internet service providers. Furthermore, the switch of mobile operators' focus from pure mobile services towards fixed-line offerings, regulatory actions by the Federal Network Agency and the increasing quality and acceptance of Voice over Internet Protocol ("VoIP") services will increase pressure on our market shares, revenues and margins.

Additional local and regional network operators are expanding their presence to include other major cities and regions. In the future, we could face even fiercer competition and lose further market share if our competitors were to combine their businesses.

The German markets for Internet access and portal services, especially within the broadband market, have been, and will continue to be, highly competitive and are increasingly saturated. Prices for broadband flat rates have been steadily declining. Our future competitive position in the broadband/fixed-network business in Germany will be affected by pricing, network speed and reliability, services offered, customer support and our ability to be technologically adept and innovative. The regulatory environment can also exert a significant influence on the level of competition. We expect that our competitors will continue to pursue new broadband customers aggressively. In addition, a weaker economy may increase pressure on our revenues and margins in these markets. Furthermore, regulatory decisions have required us to offer to our competitors an IP bitstream access product, which enables our competitors to expand their operations throughout Germany without building their own infrastructure.

Part of the challenge in the fixed-network business in Germany continues to be the improvement of our reputation for customer service while implementing cost-saving measures. If we do not continue to improve our customer service sustainably, there is a risk of a negative impact on customer loyalty that could lead to higher losses of customers.

We also expect prices in mobile voice telephony and mobile data services to decline further, which could adversely affect our mobile revenue. Among the main reasons for the decrease in prices are providers that are pursuing aggressive pricing policies and are expanding in Germany and other European markets, as resellers and "no-frills" operators, such as "Drillisch", offer discount rates without significant minimum-contract term obligations. With our "Congstar" brand, we also participate in this market. Competition in the German mobile telecommunications segment with established players such as Vodafone and O_2 is also intense and can be expected to increase further in the future.

As the German market for mobile telecommunications has become increasingly saturated, the focus of competition has been shifting from customer acquisition to customer retention, and increasing the quality and value of existing customers. Accordingly, if we are unable to increase revenues through increased quality and better value to our customers, we may not be able to compensate by increasing our market share. Going forward, pure eSIM smartphone offerings, which would give consumers the option to switch provider and plan without having to request a new SIM card, could put even more downward pressure on prices for mobile voice telephony and mobile data services.

Europe

Competition in the European mobile telecommunications markets run by our Europe operating segment is intense and can be expected to increase in the future. Even though partnerships and consolidations in the industry, for example, in Austria, are providing impetus for some stabilization in pricing, new players continue to enter the market through spectrum auctions and wholesale agreements. Growing competition results, to a different extent in each regional market, from the market entry of alternative carriers (such as cable TV operators) or low cost carriers (such as Mobile Virtual Network Operators or "MVNOs"), technology shifts (such as IP-based telecommunications networks) and from market consolidation. In addition, the risk remains that smaller competitors will take unforeseen, aggressive pricing measures. In particular, providers are positioning themselves through low-price bundled products and MVNOs are using aggressive pricing, e. g., RCS and RDS in Romania and Play in Poland. In addition, over-the-top ("OTT") players such as WhatsApp, which offer audio, video, and other media over the Internet without the involvement of a multiple-system operator in the control or distribution of the content, are increasingly replacing traditional voice and text messaging solutions.

If prices for mobile telecommunications services continue to decline through competition and/or regulation more than anticipated and this decline is not compensated for by higher usage, we may be unable to achieve our planned objectives, including our strategic targets. In addition, operators' expansion of convergent product offerings from fixed-line to mobile sectors (or vice versa) may result in a competitive disadvantage for our mobile telecommunications operations in countries in which we offer only mobile communications services. Moreover, technologies such as W-LAN, WiMax and VoIP, which can be used with existing hardware and platforms, could drive voice and data traffic from mobile networks, which could lead to significant price and revenue reductions.

Demand for telecommunications services continues to be affected by the potential of continued economic stagnation and tepid economic growth in European economies. In addition, special taxes levied on telecommunications services, such as those in Romania and Greece for example, and the costs of spectrum auctions, for instance in Poland, impacted the telecommunications industry in a number of our footprint countries.

As European markets have become increasingly saturated, the focus of competition has been shifting from customer acquisition to customer retention, and increasing the quality and value of existing customers. Accordingly, if we are unable to offer increased quality and better value to our customers, our market share and revenues may not grow as we have anticipated in our plans and strategic targets.

United States

In the United States, two of our main national competitors — AT&T and Verizon Wireless — are significantly larger than T-Mobile US. Our relative market position in the United States entails particular risks, especially in connection with our market shares, brand positioning, network coverage, including in roaming agreements, and network quality. In particular, our largest competitors' scale could afford them significant structural and competitive advantages in this market and enable them to react more quickly to challenges, to invest more effectively in market opportunities and to spend more on customer acquisition. They may be in a better position to enter into exclusive handset, device, or content arrangements, execute pervasive advertising and marketing campaigns, or otherwise improve their cost position relative to ours. In addition, the refusal of our large competitors to provide critical access to resources and inputs, such as roaming services on reasonable terms, may improve their position within the wireless broadband mobile services industry. This situation presents T-Mobile US with a long-term challenge to compete effectively in terms of pricing, products, coverage and the introduction of new technologies and services.

We expect the consolidation of the U.S. telecommunications market to continue as growth has slowed as a result of high market penetration. The U. S. mobile market continues to be characterized by intense competition among mobile carriers. Competitive factors within the U.S. mobile market that can drive consolidation (as well as putting pressure market participants more generally) 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. Customer attrition, also known as churn, may increase as the wireless industry shifts away from service contracts. We also expect that our customers' growing appetite for data services will place increased demands on our network capacity. These competition and capacity issues will continue to put pressure on pricing and margins as companies compete for potential customers. Our ability to compete will depend on, among other things, continued absolute and relative improvement in network quality and customer services, effective marketing and selling of products and services, attractive pricing, and cost management, all of which will involve significant expenses.

We expect joint ventures, mergers, acquisitions and strategic business combinations in the U.S. mobile industry to result in increased competition in the U.S. market. Some players operate using alternative business models that have the potential to negatively affect T-Mobile US's ability to attract and retain customers, such as MVNOs, which rely on the networks of one or more of the four national carriers to transport their mobile and data traffic. In addition to traditional competitors, the entrance and influence of manufacturers, service providers, cable providers and other new market participants, could put further pressure on the wireless industry in general and T-Mobile US. In particular, industries are converging as video, mobile and broadband companies compete to deliver content as the next generation of offerings. 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. and we note the positive decision by the U.S. antitrust authorities in June 2018 approving the acquisition. 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.

The incumbent wireless industry is experiencing disruptive innovation on many fronts. For example, Smartphone penetration is near 80% of the U.S. mobile market. While smartphone use is expected to continue to grow, tablet sales and other "smart" devices, such as watches and Internet-enabled devices embedded in non-communications devices (referred to as "the Internet of things"), have gained traction. Rapid penetration of smartphones and tablets and the associated increases in data usage will require carriers to invest in device subsidization and network improvements.

As price competition for contract customers becomes greater, comprehensive coverage and quality as well as attractive "smartphone" offerings will be key to T-Mobile US's sustained commercial success. In the future, we will require additional spectrum in order to meet the rising demand for capacity. If T-Mobile US cannot acquire sufficient spectrum, the quality of our services may deteriorate due to saturated frequency capacities. The scarcity and cost of additional wireless spectrum, and regulations relating to spectrum use, may adversely affect our business strategy and financial planning. T-Mobile US has won in the FCC 600 MHz auction in 2017 to enhance its portfolio. However, gaining access to that spectrum may take up to three years or more.

Systems Solutions

Our Systems Solutions business is subject to risks associated with the general and regional economies of its customers and the willingness and ability of its customers to invest in information and communications technology services and products. The ICT market is characterized by long sales cycles, intense competition, declining prices and restraint in the awarding of projects, while the recent gradual economic recovery has had little impact.

Continued intense cost pressure in the private sector and particularly in the public sector means that the balance between differentiation (softening of price competition) and standardization (cost cutting) remains critical. This creates a potential risk of revenue losses and declining margins for T-Systems.

In addition, the international growth potential of T-Systems may be constrained by its limited brand recognition in some national markets, at least compared to that of competitors who may be more established there, particularly as this relates to maintaining and increasing business with multinational companies outside of Germany. Additionally the relatively small size of some international T-Systems units may require expensive additional management resources from Germany.

If T-Systems' focus on multinational customers and its service offerings, such as dynamic services or cloud computing are not successful, T-Systems may lose market share to its competitors, suffer reduced revenues and incur losses.

For more information, see "*Description of Our Business and Operations*" and "*Development of Our Business*".

We may not realize either the expected level of demand for our products and services, or the expected level or timing of revenues generated by those products and services, as a result of lack of market acceptance or technological change, which could adversely affect our cash flows and results of operations.

There is a risk that we will not succeed in making customers sufficiently aware of existing and future value-added services or in creating customer acceptance of these services at the prices we would seek to charge. In addition, market acceptance for these new products and services could be negatively affected by customer reluctance to pay for additional features. In general, the development of new services in the wireless telecommunications industry will require us to anticipate and respond to the continuously changing demands of our customers, which we may not be able to do accurately or in a timely manner. This also includes, for example, effective forecasting and planning and sourcing of device inventory. There is also a risk that we will not be able to bring new services to market as quickly or price-competitively as our competitors. These risks exist, in particular, with respect to our anticipated future growth drivers in the mobile and the fixed-line telecommunications area, which include, among others, the rising customer demand for integrated telecommunications products (fixed mobile convergence); our TV and home automation (Smart Home) offerings; dedicated services enabled by the fifth generation mobile communications standard (5G); connectivity-based solutions for the Internet of Things; as well as our own and partner cloud products. If our new services fail to gain or retain acceptance in the marketplace or if costs associated with these services are higher than anticipated, this could have a material adverse effect on our business, financial condition and operating results.

In order to grow and remain competitive with new and evolving technologies in our industry, we will need to adapt to future changes in technology, continually invest in our network, enhance our existing offerings and introduce new offerings to address our current and potential customers' changing demands. We are investing in an integrated, pan-European IP network in order allow us to meet our customers' demands more quickly, flexibly, and economically. Enhancing our network is subject to risk from equipment changes and migration of customers from existing spectrum bands and meeting various future requirements.

Adopting new and sophisticated technologies may result in implementation issues such as scheduling and supplier delays, unexpected or increased costs, technological constraints, inability to deliver new product or services in time, regulatory permit issues, customer dissatisfaction and other issues that could cause delays in launching new technological capabilities, which in turn could result in significant costs or reduce the anticipated benefits of the upgrades. Ever shorter innovation cycles confront the telecommunications sector with the challenge of introducing new products and services in increasingly shorter intervals. New technologies are superseding existing technologies, products, or services in part, and 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.

Some of our investments (such as in new spectrum licenses) to develop future products and services may involve substantial cash outlays with no certainty of market acceptance.

There is a risk that the return on our investments, in particular in new spectrum licenses and network infrastructure (*e.g.*, for 5G services, fiber-optic-roll-out), may negatively deviate from our plans. In addition to the negative impact on our cash flows, this could result in significant write-downs of the value of spectrum or other licenses or other network-related investments.

Should we face a continuously deteriorating economic climate, we may decide, or be required, to scale back capital expenditures. We believe that we have flexibility in terms of the amount and timing of our capital expenditure program, but a lasting reduction in capital expenditure levels below certain thresholds could affect our future growth, in particular in our mobile operations.

Failure to achieve our planned reduction and restructuring of personnel or our human resources-related cost-savings goals could negatively affect our reputation and the achievement of our financial objectives and profitability.

In 2015, we once again used socially responsible measures to restructure the workforce in the Group, essentially by means of voluntary redundancies, partial and early retirement and employment opportunities for civil servants and employees, especially in the public sector. We intend to continue to restructure our workforce in the coming financial year. If it is not possible to implement the measures as planned or at all, this may have negative effects on our financial targets and profitability as well as our reputation.

The successful realization of any staff reduction program depends on a range of factors that are beyond our control, such as general developments in the labor market, the demand for our retrained labor force and the level of acceptance of the various severance offers and other voluntary reduction measures. If planned staff reduction targets are not achieved, this would have a negative effect on our operating expenses and profitability.

We rely on highly-skilled personnel throughout all levels of our business. Our business could be harmed if we are unable to retain or motivate key personnel, hire qualified personnel or maintain our corporate culture.

The market for highly-skilled personnel in our industry is extremely competitive. We believe that our future success depends in substantial part on our ability to recruit, hire, motivate, develop and retain talented and highly-skilled personnel for all areas of our organization. Doing so may be difficult due to many factors, including fluctuations in economic and industry conditions, changes to immigration policy, competitors' hiring practices, employee tolerance for the significant amount of change within and demands on us and our industry, and the effectiveness of our compensation programs. Our continued ability to compete effectively depends on our ability to retain and motivate our existing employees and to attract new employees. If we do not succeed in retaining and motivating our existing key employees and attracting new key personnel, we may not be able to meet our business plan and, as a result, our revenue growth and profitability may be materially adversely affected.

As a result of dispositions of certain non-core businesses in Germany, there is an increased risk of return of civil servants transferred out of the Group, which could have a negative impact on our staff and cost reduction objectives.

Our employees who have civil servant status can, based on German civil service law, only be completely transferred to the buyer of a business from us in exceptional cases. Therefore, as a general matter, such transferred civil servants are placed on leave of absence while employed with the transferred business unit. Accordingly, in the event of termination of employment with the transferred business unit, there is a risk that such civil servants will return to the Group. As of December 31, 2017, there were around 1,658 civil servants that could have availed themselves of this right of return to the Group. This risk could be reduced by compensation payments, for example, but it cannot be completely eliminated.

If further Group units employing civil servants are disposed of, the risk of additional civil servants returning after the end of their temporary leave may again increase. For further information regarding general human resources-related matters, see "*Directors, Senior Management and Employees*".

We may be unable to adequately protect our intellectual property. Additionally, we use equipment, software, technology and content in the operation of our business, which may subject us to third-party intellectual property claims and we may be adversely affected by litigation involving our suppliers.

We rely on a combination of patent, service mark, trademark, design and trade secret laws and contractual restrictions to establish and protect our proprietary rights, all of which offer only limited protection. The steps we have taken to protect our intellectual property may not prevent the misappropriation of our proprietary rights. We may not have the ability in certain jurisdictions to adequately protect intellectual property rights. Moreover, others may independently develop trademarks, processes and technologies that are competitive to ours. Unauthorized use of our intellectual property rights may increase the cost of protecting these rights or reduce our revenues. We cannot be sure that any legal actions against such infringers will be successful or will not result in default, damage or reimbursement of other financial costs, *e.g.*, for management resources, even when our rights have been infringed. We cannot assure you that our pending or future patent applications will be granted or enforceable, or that the rights granted under any patent that may be issued will provide us with any competitive advantages. In addition, we cannot assure you that any trademark or service mark registrations will be issued with respect to pending or future applications or will provide adequate protection of our brands, such as use and renewal. Any of these factors could have material adverse effects on our business, results of operations and financial condition.

Third parties may claim we infringe their intellectual property rights. We are a defendant in numerous intellectual property lawsuits, including patent infringement lawsuits and suits brought by patent exploitation enterprises, which exposes us to the risk of adverse financial impact either by way of significant settlement amounts, license fees or damage awards. We may not have insurance coverage for intellectual property losses, and as such, a charge for an anticipated settlement, or an adverse ruling awarding damages, represents unplanned loss events. As we adopt new technologies and new business systems to follow new communication trends, and provide customers with new products and/or services, we may face additional infringement claims. These claims could require us to cease certain activities or to cease selling relevant products and services. These claims can be time-consuming and costly to defend, and divert management resources. In addition to litigation directly involving us, our vendors and suppliers can be threatened with patent or trademark litigation and/or subjected to the threat of disruption or blockage of sale, use, or importation of products, posing the risk of supply chain interruption to particular products and associated services exposing us to material adverse operational and financial impacts. For information concerning our disputes in relation to intellectual property rights, see "*Legal Proceedings—Disputes in Relation to Intellectual Property Rights*".

We regularly engage in large-scale programs to reshape our information technology ("IT") and network infrastructure ("NT") to adapt to changing customer needs and organizational and accounting requirements. The implementation of any of these programs may require substantial investments, and a failure to effectively plan and monitor them could lead to misallocations of resources and impaired processes with negative consequences for our operations.

Our IT and network resources and infrastructure represent our organizational and technical backbone. This infrastructure is the basis for innovative telecommunications products and services that we offer or plan to offer in the future. We have implemented comprehensive programs to adapt our IT systems and infrastructure to changing customer needs and our new organizational structure resulting from the consolidation of our fixed-line and mobile networks in Germany and Europe. We are replacing the various architectures, access types and services with a standardized architecture. Risks could arise in this area relating to all IT systems and products that require Internet access.

Due to the enormous complexity of the implementation of IT and NT infrastructure, malfunctions, connectivity issues, implementation delays, inadequate planning and management and other unforeseen problems could result in costly process impairments and remediation, and possible extended down-times of IT processes. These problems could result in revenue losses and may hamper the attainment of our goals in terms of cost savings and quality improvements.

In the United States, our systems for sales processes and service have become less efficient over time, leading to interruptions or outages. We are currently implementing a new customer billing system, which involves moving to a new third-party supported platform and utilization of a phased deployment approach. Post implementation, we plan to operate both the existing and new billing systems in parallel to aid in the transition to the new system until all phases of the conversion are complete. The implementation may cause major system or business disruptions or we may fail to implement the new billing system in a timely or effective manner.

In addition, one of our most important IT programs deals with the long-term development and implementation of a comprehensive IP platform that will support both fixed-line and mobile telephony services. This means that the traditional platform will be completely replaced by an IP-based system. Upon implementation of this joint IP platform, we will be subject to risks inherent in all IT systems connected to the Internet, such as hacker attacks, "spam calls" and other disruptions. These risks could lead to a temporary interruption of our IT resources and, as a result, impair the performance of our technical infrastructure.

If our efforts, or those of third party service providers, to maintain the privacy and security of our customer, confidential, or sensitive information are not successful at preventing a significant data breach or cyber-attack, we could incur substantial additional costs, become subject to litigation, enforcement actions or regulatory investigation, and suffer reputational damage.

Our business, like that of most retailers and wireless companies, involves the receipt, storage and transmission of confidential information, including sensitive personal information, consumer preferences and payment card information of our customers and other persons who apply to become customers, confidential information about our employees and suppliers, other sensitive information about our company, such as our business plans, transactions and intellectual property ("confidential information") and may include governmental classified information. The methods used to obtain unauthorized access, disable or degrade service, or sabotage systems are constantly changing and evolving, and unauthorized access to confidential information may be difficult to anticipate or detect or prevent, particularly given that the methods of unauthorized access constantly change and evolve. Cyber-attacks, such as denial of service, advanced persistent threats, other malicious attacks, unauthorized access or distribution of confidential information by third parties or employees, errors or breaches by third party suppliers, or other breaches of security could disrupt our internal systems and applications, impair our ability to provide services to our customers, and protect the privacy and confidentiality of our sensitive information. Such attacks against companies are occurring with greater frequency and may be perpetrated by a variety of groups or persons, including those in jurisdictions where law enforcement measures to address such attacks are ineffective or unavailable, and such attacks may be perpetrated by or at the behest of foreign governments.

In addition, we provide confidential, proprietary and personal information to third party service providers when it is necessary to pursue business objectives. We and our third party service providers have been subject to cyber-attacks and unauthorized access to confidential information in the past, including a breach of one of our credit check providers in

September 2015 in the United States in which a subset of records containing current and potential customer information was compromised by an external party.

Our procedures and safeguards to prevent unauthorized access to or use of sensitive data and to prevent data loss and defend against attacks seeking to disrupt our services, must be continually evaluated and revised to address, the ever-evolving threat landscape. We cannot assure you that all security measures and preventive actions taken will adequately repel a significant attack, prevent information security breaches or the misuses of data, unauthorized access by third parties or employees, or exploits against third party supplier environments. If we are subject to such attacks or security breaches, we may incur significant costs, be subject to regulatory investigations, sanctions and private litigation, experience disruptions to our operations or suffer damage to our reputation that negatively impacts customer confidence. Any future cyber-attacks or security breaches may materially adversely affect our business, financial condition and operating results.

Shortcomings in our supply and procurement process could negatively affect our product portfolio, revenues and profits.

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.

Although we do not believe that we are materially dependent on any single supplier, our contractors may want to extend delivery times, raise prices and limit supply due to their own shortages or changing business and product strategies. Furthermore, our vendors may be subject to litigation or bans with respect to technology that is important for the conduct of our business. Especially in times of economic and political turmoil, supply chains, credit access and financial stability of our vendors may be negatively affected, which could disturb our commercial relationship with them. Although we have implemented organizational, contractual and procurement strategy measures to counteract such risks, delivery bottlenecks, price increases, changes in the prevailing economic conditions or suppliers' product strategies may have a negative impact on our business processes and results. Our results may be adversely affected by the dependence on individual suppliers or from individual vendors' defaulting on their obligations to us.

System failures due to natural or man-made disruptions and loss of data could result in reduced user traffic and reduced revenues and could harm our reputation and results. We are also exposed to risks relating to the functionality of our existing IT architecture.

System failures due to natural or man-made disruptions, including wildfires, lightning, flooding, hurricanes and other calamities, technology failures, human error, terrorist attacks, hacker attacks (such as the one mentioned above) and malicious actions (*e.g.*, theft or misuse of customer data), vandalism, and other similar events, and the resulting loss of data could result in reduced user traffic and reduced revenues, and could harm our reputation and results. Furthermore, insurance premiums could increase or obtaining adequate insurance coverage for business interruptions due to such disasters in the future could become more difficult.

We also face the risk 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.*, arising from natural disasters or fire, we use technical early warning systems and duplicate IT/NT systems. The Computer Emergency Response Team (CERT) at T-Systems provides security for corporate customers' servers. Our data centers have security certification and meet strict legal data protection provisions and EU regulations, especially those from the new GDPR. All data relating to companies and private persons are protected from external access. We cannot, however, be certain that these measures will be effective under all circumstances, and that disruptions or damages will not occur. Disruption or damage to our infrastructure may result in reduced user traffic and revenues, increased costs and damage to our reputation.

We are continuously involved in disputes and litigation with government agencies, competition authorities, competitors and other parties. The ultimate outcome of such legal proceedings is generally uncertain. When finally concluded, they may have a material adverse effect on our results of operations and financial condition.

We are subject to numerous risks relating to legal and regulatory proceedings, in which we are currently a party or which could develop in the future. Litigation and regulatory proceedings, including patent infringement lawsuits, are inherently unpredictable. Legal or regulatory proceedings in which we are or come to be involved (or settlements thereof) may have a material adverse effect on our results of operations or financial condition. For information concerning some of the litigation in which we are involved, including with respect to Toll Collect, inaccuracies in the prospectuses of public share offerings see "*Legal Proceedings* ". For information concerning our regulatory environment, see "*Regulation*".

Alleged health risks of wireless communication devices have led to litigation affecting markets with our mobile telecommunications operations subsidiaries, and could lead to decreased wireless communications usage or increased difficulty in obtaining sites for base stations and, as a result, adversely affect the financial condition and results of operations of our wireless services business.

Mobile communications and the electromagnetic fields emitted from wireless mobile devices and cell sites regularly give rise to concerns among the general population regarding potential health risks, including cancer. Lawsuits have been filed against manufacturers and carriers in the industry claiming damages for alleged health problems arising from the use of wireless handsets. Electromagnetic fields may also interfere with various electronic medical devices, including hearing aids and pacemakers. There is continuing public, political and scientific debate of this issue, and research and studies are ongoing. The World Health Organization and the International Commission on Non-Ionizing Radiation Protection ("ICNIRP") regularly reviews the recommendations for the limit values based on current scientific knowledge. However, we cannot provide full assurance that research in the future will not establish links between radio frequency emissions and health risks.

Whether or not such research or studies conclude there is a link between radio frequency emissions and health, popular concerns about radio frequency emissions may discourage the use of wireless devices and may result in significant restrictions on the location and operation of cell sites by our mobile telecommunications subsidiaries and the usage of our wireless devices, telephones or products using wireless technology. Such restrictions on use could have material adverse effects on our results of operations. In particular, these concerns may negatively affect projects in our mobile communications business, such as the deployment of mobile networks and the use of mobile terminal devices. In the fixed network business, they may negatively affect sales of, for example, traditional DECT (digital cordless) phones and devices that use WiFi technology. There is a risk of increased regulation of our business, which could include reduced electromagnetic field thresholds or the implementation of precautionary measures in mobile communications, such as amendments to regulations governing the construction of cellular towers or labeling requirements for handsets.

T-Mobile US, like other wireless carriers, faces the potential for significant adverse judgments or settlements from litigation claims of health or safety effects related to the use of handsets, tablets or other personal wireless devices that access our network. For example, a number of coordinated cases seeking damages are currently pending in superior court in Washington D.C. against T-Mobile US, the other major carriers, and handset manufacturers alleging that radiofrequency emissions from cell phones caused brain tumors. Claims may also arise out of physical proximity to wireless network hardware (*e.g.*, cell site antennas). Any such litigation, legislation or adverse actions may result in additional costs and loss of revenues in our mobile communications businesses.

In the United States, state and local governments continue to consider requirements for mandatory labeling of handsets with SAR (Specific Absorption Rate) levels or notices regarding potential health risks of radiofrequency emissions. We may also be subject to potential litigation relating to customer use while driving of handsets and other personal wireless devices that access our network.

Additionally, there are safety risks associated with the use of wireless devices while operating vehicles or equipment. Concerns over any of these risks and the effect of any legislation, rules or regulations that have been and may be adopted in response to these risks could limit our ability to sell our wireless services.

Our financial performance will be impaired if we experience high fraud rates related to device financing, credit cards, dealers, or subscriptions.

Our operating costs could increase substantially as a result of fraud, including device financing, customer credit card, subscription or dealer fraud. If our fraud detection strategies and processes are not successful in detecting and controlling fraud, whether directly or by way of the systems, processes and operations of third parties such as national retailers, dealers and others, the resulting loss of revenue or increased expenses could have a materially adverse impact on our financial condition and results of operations.

Negative media reports on our products and services or our corporate activities could have a material impact on our reputation, standing and brand image.

Negative media reports on our products and services or our corporate activities could have a material impact on our reputation, standing and brand image. Online news and social networks services, such as Facebook and Twitter, have made it possible that such information and opinions can spread faster and more widely. Ultimately, negative reports can impact revenue and brand value.

Developments in the telecommunications sector have resulted, and may in the future result, in substantial write-downs of the carrying value of certain of our assets.

The value of the assets of Deutsche Telekom 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 or property, plant and equipment might have decreased. These tests may lead to the recognition of impairment losses that do not, however, result in cash outflows. This could, however, materially adversely affect our results of operations, which can lead to perceptions of financial weakness and damage our prospects and our ability to achieve our strategic plans.

Our forecasts and forward-looking information may prove to be incorrect.

The Board of Management has prepared and published forecasts and targets regarding our anticipated financial performance based on its best estimate of our probable results of operations. These forecasts and targets have not been reviewed by our independent accountants, and were made with respect to conditions as of the date of their publication based on the then-current structure of the Group, without regard to significant acquisitions, dispositions, business combinations or joint ventures we may choose to undertake. In addition, they are based on several assumptions, which our Board of Management believes are reasonable, regarding future market and economic developments. Some assumptions upon which the projections are based, however, will not materialize due to the inevitable occurrence of unanticipated events and circumstances. For example, we may fail to meet our forecasts and targets due to an economic downturn in Europe or North America, changes in exchange or interest rates, the negative outcome of litigation or regulatory matters in which we are involved, adverse competitive and regulatory developments or the materialization of other risks inherent to our business including those summarized in this offering memorandum. Therefore, our actual results of operations will likely vary from our forecasts and targets, and such variances may be both adverse and material. While the Board of Management believes that the forecasts and targets accurately reflect its intentions and expectations regarding future results of our operations, those results cannot be guaranteed.

Our stated strategies in general, and acquisitions in particular, may be adapted or modified to respond to opportunities and changing conditions.

We may adapt or modify our stated strategies to respond to opportunities and changing conditions. We may embark on capital expenditure programs and pursue acquisitions, joint ventures or full or partial dispositions or combinations of businesses where we perceive opportunity for profitable growth, cost savings or other benefits for the Group, which may also include asset sales. Transactions may be conducted using newly issued shares of Deutsche Telekom or its affiliates, cash or a combination of cash and shares, and may individually or in the aggregate be material to our financial and business condition or results of operations. As a result, such transactions may affect the trading prices of our securities. As in the past, discussions with third parties in this regard may be commenced, on-going or discontinued at any time and from time to time.

Even though we conduct a review of the companies, businesses, assets, liabilities or contracts we plan to acquire, it is generally not feasible for these reviews to be complete in all respects. As a result, we may assume unanticipated liabilities, or an acquisition may not perform as well as expected. In addition, we might have difficulty integrating any entity with which we combine our operations. Failure to complete announced business combinations or failure to integrate acquired businesses successfully into ours could materially and adversely affect our financial condition and results of operations. It could also affect investors' perception of our business prospects and management, and could also lead to departures of key employees, or lead to increased costs and reduced profitability if we felt compelled to offer them financial incentives to remain.

Potential breaches of compliance requirements or the identification of material weaknesses in our internal control over financial reporting may have an adverse impact on our corporate reputation, financial condition and the trading price of our securities.

In general, compliance requirements for publicly-traded companies and, in particular, the investigation of potential breaches and corporate misconduct are increasing and leading to major financial implications for the companies concerned. At the same time, the legal framework governing the monitoring of companies is becoming more comprehensive, which increases liability risks for executive bodies and associated costs.

While we believe that we have established an appropriate compliance organization to detect, assess, reduce and manage these risks, and to involve public authorities when appropriate, the global and diverse nature of our operations and business relationships means that these risks and their related consequences will continue to exist. Although our organization is set up to take prompt measures to effectively remediate any identified shortcomings in our internal controls over financial reporting, activities of this kind may involve significant effort and expense, and disclosure of any failures, material weakness or other conditions, may result in a deterioration of our corporate image and negative market reactions.

Liquidity, credit, currency, interest rate, exchange rate, rating and tax risks have had, and may continue to have, an adverse effect on our revenue and cost development.

With regard to our assets, liabilities and planned transactions, we are particularly exposed to liquidity risks, credit risk, and the risk of changes in exchange and interest rates. Our financial risk management aims to contain these risks in connection with ongoing operational and finance activities.

We are exposed to liquidity risk, which is the risk arising from our potential inability to meet all payment obligations when they become due or only being able to meet them at excessive cost. With the aim of ensuring our solvency and financial flexibility at all times, we maintain a liquidity reserve in the form of credit lines and cash as part of our liquidity management. This liquidity reserve is to cover the maturities of the next 24 months at any time. For medium- to long-term financing, we primarily use bonds issued in a variety of currencies and jurisdictions. Our liquidity may become impaired due to reluctance of our counterparties or the market to finance our operations due to actual or perceived weaknesses in our businesses, our business model or our strategy, as well as in our resilience to counter negative economic and market conditions. For example, we could be subject to liquidity risks following the closing of the proposed T-Mobile US and Sprint Merger (see "*Description of Our Business and Operations— Group Organization— Significant Corporate Transactions— T-Mobile US and Sprint Merger*"). Assuming the merger of T-Mobile US and Sprint closes, we may also experience pressure on our liquidity if, for example, the costs of integration of the two companies exceeds our expectations or cash flow generation is lower than we expect.

Through our operating business and certain financing activities, we are also exposed to a credit risk, *i.e.*, the risk that a counterparty will not fulfill its contractual obligations.

Our credit rating with Moody's is Baa1, while Fitch and Standard & Poor's rate Deutsche Telekom BBB+. Fitch gives Deutsche Telekom a "stable" outlook, Moody's a "negative" and Standard & Poor's a "CreditWatch negative". A decrease in our credit ratings below certain thresholds by various rating agencies would result in an increase in the interest rates on certain of our bonds and medium-term notes due to step-up provisions and could raise the cost of our debt refinancing activities generally. For more information, see "*Development of Our Business—Condensed Consolidated Statement of Cash Flows and Reconciliation of Free Cash Flow—Step-Up Provisions*".

We are exposed to currency risks from our investing, financing and operating activities. Risks from foreign currency fluctuations are hedged if they affect our cash flows (*i.e.*, if the cash flow is not denominated in the functional currency of the respective Group company). Foreign-currency risks that do not influence our cash flows (*i.e.*, the risks resulting from the translation of statements of assets and liabilities of foreign operations into the our reporting currency) are generally not hedged, however. We may nevertheless also hedge this foreign-currency risk under certain circumstances. There can be no guarantee that our hedging strategies will succeed. Currency risks may have a negative impact on our results of operations when amounts in local currencies are translated into euros, particularly in connection with U.S. dollar-denominated results.

Our interest rate risk mainly results from interest-bearing liabilities and exists primarily in the Eurozone and the United States. Interest-rate risks arise as a result of fluctuations in interest rates affecting the level of interest payments due on indebtedness at variable rates. To minimize the effects of interest rate fluctuations in these regions, we manage the interest rate risk for net debt denominated in euros and U.S. dollars separately. Once a year, as part of the interest rate management, the maximum allowable deviation from the planned interest result is determined (referred to as the "risk budget"). In order to hold that risk budget, Group treasury issues primary financial instruments and — if needed — concludes derivative financial instruments to adjust the mix of the debt portfolio (*i.e.*, mix of fix and floating rate debt; average duration). On a regular basis the Board of Management and the Supervisory Board are informed.

In many countries, we are subject to the applicable legal tax provisions. Risks can arise from changes in local taxation laws or case law and different interpretations of existing provisions. If we have incorrectly described, disclosed, calculated, assessed, or remitted amounts that were due to governmental authorities, we could be subject to additional taxes, fines, penalties, or other adverse actions, which could materially impact our business, financial condition and operating results. If federal, state, and/or local municipalities were to significantly increase taxes on our network, operations, or services, or seek to impose new taxes, it could have a material adverse effect on our business, financial condition and operating results.

Dutch tax risks related to the new government's approach on tax avoidance and tax evasion

On October 10, 2017, the new Dutch government released its coalition agreement (*Regeerakkoord*) 2017-2021, which includes certain policy intentions for tax reform. On February 23, 2018, the Dutch State Secretary for Finance published a letter with an annex containing further details on the government's policy intentions against tax avoidance and tax evasion. Two policy intentions in particular may become relevant within the context of the Dutch tax treatment of the Issuer, the Notes, and/or payments in respect of the Notes.

The first policy intention relates to the introduction of an "interest withholding tax" on interest paid to creditors in low tax jurisdictions or non-cooperative jurisdictions as of 2021. The coalition agreement and the annex to the letter suggest that this interest withholding tax would apply to certain payments made by a Dutch entity directly or indirectly to a group entity in a low tax or non-cooperative jurisdiction. However, it cannot be ruled out that it will have a wider application and, as such, it could potentially be applicable to payments in respect of the Notes.

The second policy intention relates to the introduction of a "thin capitalization rule" as of 2020 that would limit the deduction of interest on debt exceeding 92% of the commercial balance sheet total. The heading in the coalition agreement and the annex to the letter suggest that this thin capitalization rule will apply solely to banks and insurers. However, it cannot be ruled out that it will have a generic application and, as such, it could potentially be applicable to other taxpayers (including the Issuer).

Many aspects of these policy intentions remain unclear. However, if the first policy intention is implemented it may have an adverse effect on the Notes, the Issuer and its financial position and may give rise to an Optional Tax Redemption (as described under "*—Optional Tax Redemption*"), in which case the Issuer may redeem the Notes pursuant to its option under "*—Optional Tax Redemption*".

Risks Related to the Proposed T-Mobile US and Sprint Merger

The closing of the Transactions is subject to many conditions, including the receipt of approvals from various governmental entities, which may not approve the Transactions, may delay the approvals for, or may impose conditions or restrictions on, jeopardize or delay completion of, or reduce the anticipated benefits of, the Transactions, and if these conditions are not satisfied or waived, the Transactions will not be completed.

The completion of the Transactions is subject to a number of conditions, including, among others, obtaining certain U.S. governmental authorizations, consents, orders or other approvals and the absence of any injunction prohibiting the Transactions or any legal requirements enacted by a court or other governmental entity preventing consummation of the Transaction. There is no assurance that these required authorizations, consents, orders or other approvals will be obtained or that they will be obtained in a timely manner, or whether they will be subject to required actions, conditions, limitations or restrictions on our or the combined company's business, operations or assets. If any such required actions, conditions, limitations or restrictions are imposed, they may jeopardize or delay completion of the Transactions, reduce or delay the anticipated benefits of the Transactions or allow the parties to terminate the Transactions, which could result in a material adverse effect on the business of T-Mobile US or the combined company's business, financial condition or operating results, which in turn can have material adverse effects on our business. In addition, the completion of the Transactions is also subject to T-Mobile US having specified minimum credit ratings on the closing date of the Transactions (after giving effect to the Merger) from at least two of the three credit rating agencies, subject to certain qualifications. If T-Mobile US terminates the business combination agreement with Sprint (the "Business Combination Agreement") in connection with a failure to satisfy the closing condition related to the specified minimum credit ratings, then in certain circumstances, it may be required to pay Sprint an amount of $600 million.

Deutsche Telekom, T-Mobile US and Sprint are subject to various uncertainties, contractual restrictions and/or requirements due to the Transactions that could disrupt our, T-Mobile US's or the combined company's business and adversely affect our business, assets, liabilities, prospects, outlook, financial condition and results of operations.

Uncertainty about the effect of the Transactions on employees, customers, suppliers, vendors, distributors, dealers and retailers may have an adverse effect on us. These uncertainties may impair T-Mobile US's ability to attract, retain and motivate key personnel during the pendency of the Transactions and, if the Transactions are completed, for a period of time thereafter, as existing and prospective employees may experience uncertainty about their future roles with T-Mobile US or the combined company. If key employees depart because of issues related to the uncertainty and anticipated difficulty of integration or a desire not to remain with T-Mobile US or the combined company, our business could be negatively impacted whether or not the Transactions are ultimately consummated. Additionally, these uncertainties could cause customers, suppliers, distributors, dealers, retailers and others who deal with T-Mobile US to seek to change or cancel existing business relationships with T-Mobile US or fail to renew existing relationships with T-Mobile US. Suppliers, distributors and content and application providers may also delay or cease developing new products that are necessary for the operations of T-Mobile US's business due to the uncertainty created by the Transaction. Competitors may also target T-Mobile US' or Sprint's existing customers by highlighting potential uncertainties and integration difficulties that may result from the Transaction.

The Business Combination Agreement also restricts each of T-Mobile US and Sprint, without the other's consent, from taking certain actions outside of the ordinary course of business while the Transactions are pending, including, among other things, certain acquisitions or dispositions of businesses and assets, entering into or amending certain contracts, repurchasing or issuing securities, making capital expenditures and incurring indebtedness, in each case subject to certain exceptions. These restrictions may have a significant negative impact on T-Mobile US' business, results of operations and financial condition. Given the materiality to us of T-Mobile US, any of these events could have a material adverse effect on our business, results of operations and financial condition. In addition, the Business Combination Agreement provides that none of the parties to the Transactions are required to take any of the actions described in the Business Combination Agreement to bring about the consummation of the transaction if, among other things, that action would cause a loss, cost or diminution in value of $7 billion or more to T-Mobile US, Sprint or their respective subsidiaries following closing of the Transactions.

In addition, management and financial resources have been diverted and will continue to be diverted toward the completion of the Transaction. T-Mobile US has incurred, and expects to incur, significant costs, expenses and fees for professional services and other transaction costs in connection with the Transaction.

The Business Combination Agreement contains provisions that restrict the ability of T-Mobile US' Board to pursue alternatives to the Transaction

The Business Combination Agreement contains non-solicitation provisions that restrict T-Mobile US' ability to solicit, initiate, knowingly encourage or knowingly take any other action designed to facilitate, any inquiries regarding, or the making of, any proposal the consummation of which would constitute an alternative transaction for purposes of the Business Combination Agreement.

We have executed a support agreement that requires that we execute a written consent voting all of our shares of T-Mobile US common stock in favor of the Transactions, which will constitute our approval of the Transactions.

Subsequent to the execution of the Business Combination Agreement, we held approximately 63.5% of T-Mobile US common stock and entered into a support agreement (the "Support Agreement"), pursuant to which we have agreed to deliver a written consent in favor of the Transaction. The written consent will constitute receipt by T-Mobile US of the requisite approval of the Transactions by its stockholders and under the terms of the Support Agreement, we are required to deliver the written consent even if our Board changes its recommendation to our own shareholders with respect to the Transactions.

Although we expect that the Transactions will result in synergies and other benefits to us, those benefits may not be realized fully or at all or may not be realized within the expected time frame.

Our ability to realize the anticipated benefits of the Transactions will depend, to a large extent, on the combined company's ability to integrate T-Mobile US's and Sprint's businesses in a manner that facilitates growth opportunities and achieves the projected stand-alone cost savings and revenue growth trends identified by each company without adversely affecting current revenues and investments in future growth. In addition, some of the anticipated synergies are not expected to occur for a significant time period following the completion of the Transactions and will require substantial capital expenditures in the near term to be fully realized. Even if the combined company is able to integrate the two companies successfully, the anticipated benefits of the Transactions may not be realized fully or at all or may take longer to realize than expected. We expect that such Synergies result from savings in operating costs (opex) for the larger company, as well as in investments (capex). This means that these savings can be realized largely independently of market developments. Sales synergies are not included. The main areas in which synergies are to be achieved are:

- Integration of the mobile communications networks of T-Mobile US and Sprint, resulting in the operation of a single network while simultaneously increasing the customer base
- Savings in network build-out and the build-out of a nationwide 5G network
- Savings in sales and marketing costs, store fittings, advertising, customer support, repairs, and logistics
- Increased efficiency in internal IT systems and billing

Downgrades of our, T-Mobile US's and/or Sprint's ratings could adversely affect our, T-Mobile US's, Sprint's and/or the combined company's respective businesses, cash flows, financial condition and operating results.

The credit ratings impact the cost and availability of future borrowings, and, as a result, our and T-Mobile US' cost of capital. The ratings reflect each rating organization's opinion of our and T-Mobile US' financial strength, operating performance and ability to meet the debt obligations or, following completion of the Transactions, obligations to the combined company's creditors. Each of the rating organizations reviews our ratings and those of T-Mobile US periodically, and there can be no assurance that our or T-Mobile US's current ratings will be maintained in the future. Deutsche Telekom expects an S&P downgrade by one notch to BBB upon the successful closing of the Transaction. Downgrades in our or T-Mobile US's ratings could adversely affect our, T-Mobile US's and/or the combined company's respective businesses, cash flows, financial condition and operating results. As noted above, the Business Combination Agreement also contains certain conditions relating to a minimum credit rating of T-Mobile US on the closing date of the Transaction.

Risks Related to the Notes

Our credit ratings may not reflect all risks of an investment in the Notes.

The credit ratings ascribed to us and our outstanding debt securities are intended to reflect our ability to meet the payment obligations under our outstanding debt securities, and may not reflect the potential impact of all risks related to structure and other factors on the value of our outstanding debt securities or the Notes. In addition, actual or anticipated changes in our credit ratings will generally affect the market value of debt securities we have issued.

Many factors may adversely affect the trading market, value or yield of the Notes.

Each series of Notes comprises a new issue of securities for which there is currently no public market. There is no established trading market for any series of Notes. The Notes are not listed or admitted for trading on any securities exchange, and we have no plans to effect such listing or admission. There can be no assurance that any market for the Notes will develop or continue or, if one does develop, that it will be maintained, that any market for the Notes will be liquid or that holders will be able to sell their Notes when desired, or at all, or at prices they find acceptable. The liquidity of, and trading market for, the Notes may also be hurt by general declines in the market for similar securities.

In addition to our own creditworthiness, many other factors may affect the trading market for, and market value of, the Notes. These factors include:

- the method of calculating principal, premium and interest;
- the time remaining to the maturity;
- the outstanding amount of our debt securities — our debt covenants and fiscal agency agreements for our debt securities do not limit the amount of debt securities we may issue or guarantee;
- redemption or repayment features; and
- the level, direction and volatility of market interest rates generally — the conditions of the financial markets and prevailing interest rates have fluctuated in the past and are likely to fluctuate in the future, which could have an adverse effect on the market prices of the Notes, regardless of our prospects and financial performance and condition.

In addition, if you decide to sell the Notes, there may be a limited number of buyers (if any) or there may be a surplus of debt securities of other issuers available with similar credit, maturity and other structural characteristics. This may affect the price you receive for the Notes or your ability to sell them at all. You should not purchase the Notes unless you understand and know you can bear the related investment risks.

An investment in the Notes involves risks relating to changes in the interest rate environment.

A holder of a Note, which pays interest at a fixed rate, is exposed to the risk that the price of such Note could fall as a result of changes in the market interest rate. While the nominal interest rate of the Notes specified herein is fixed during the life of such Notes, the current interest rate on the capital markets ("market interest rate") typically changes on a daily basis. As the market interest rate changes, the price of the Notes would typically change in the opposite direction. If the market interest rate increases, the price of the Notes would typically fall, until the yield of such Notes is approximately equal to the market interest rate. If the market interest rate falls, the price of the Notes would typically increase, until the yield of such Notes is approximately equal to the market interest rate. Changes in the market interest rate are typically relevant to holder intending to sell their Notes prior to the maturity date, or in the case the Notes are redeemed by the Issuer prior to the stated maturity.

Notes may not be a suitable investment for all investors.

Each potential investor in Notes must determine the suitability of that investment in light of its own circumstances. In particular, each potential investor should:

- have sufficient knowledge and experience to make a meaningful evaluation of the relevant Notes, the merits and risks of investing in the relevant Notes and the information contained or incorporated by reference in this offering memorandum or any applicable supplement;

- have access to, and knowledge of, appropriate analytical tools to evaluate, in the context of its particular financial situation and the investment(s) it is considering, an investment in the Notes and the impact the Notes will have on its overall investment portfolio;

- have sufficient financial resources and liquidity to bear all of the risks of an investment in the relevant Notes, including where the currency for principal or interest payments is different from the potential investor's currency;

- understand thoroughly the terms of the relevant Notes and be familiar with the behavior of financial markets; and

- be able to evaluate (either alone or with the help of a financial adviser) possible scenarios for economic, interest rate and other factors that may affect its investment and its ability to bear the applicable risks.

Redemption may adversely affect your return on our debt securities.

The Notes are, or may become, redeemable at our option and we may choose to redeem them at times when prevailing market interest rates are lower than the interest rates on the Notes. In addition, the Notes are subject to mandatory redemption and we may be required to redeem them at times when prevailing interest rates are relatively low. As a result, you may not be able to reinvest the redemption proceeds in a comparable security at an effective interest rate as high as that of the Notes. Our redemption right may also adversely affect your ability to sell the Notes as their redemption date approaches.

Deutsche Telekom's business development is dependent on its subsidiaries' operating results and, as a result, the inability of Deutsche Telekom's subsidiaries to transfer sufficient profits or pay sufficient dividends could prevent Deutsche Telekom from meeting its obligations. In addition, direct creditors of Deutsche Telekom's subsidiaries will generally have superior claims to cash flows from those subsidiaries.

Almost all of the Group's net revenue is generated by Deutsche Telekom's subsidiaries and the vast majority of Deutsche Telekom's assets are its investments in its subsidiaries. Deutsche Telekom depends upon earnings and cash flows from its subsidiaries to meet its obligations under its debt securities, including the Notes. Certain subsidiaries of Deutsche Telekom are or may be subject to contractual restrictions or regulatory requirements that would limit their ability to pay dividends. Furthermore, insofar as Deutsche Telekom acts as a lender to subsidiaries in which there are third-party shareholders, it may face conflicts of interest in its capacities as lender and shareholder, and may indirectly benefit shareholders who do not participate in extending such financing.

In addition, Deutsche Telekom has the ability to restructure its remaining operations to cause operating assets currently held directly by Deutsche Telekom to be held by one or more subsidiaries. For example, in the past, Deutsche Telekom transferred its fixed-line operations in Germany into a wholly owned subsidiary, Telekom Deutschland GmbH. Because the creditors of any subsidiary of Deutsche Telekom would generally have a right to receive payment that comes before the parent company's right to receive payment from the assets of that subsidiary, holders of the Notes will be effectively subordinated to creditors of those subsidiaries insofar as cash flows from those subsidiaries are relevant to servicing Deutsche Telekom's debt securities. The Notes do not limit the amount of liabilities that Deutsche Telekom or its subsidiaries may incur.

The Notes do not contain financial covenants, change in control provisions or similar limitations on our flexibility.

The Notes do not contain any covenants or other provisions designed to protect holders of the Notes against a reduction in the creditworthiness of Deutsche Telekom or Finance. It also generally does not contain covenants or other provisions that would prohibit us from increasing our indebtedness or prohibit us or our affiliates from engaging in other transactions that might adversely affect holders of the Notes, including transactions involving a change in control over the relevant issuer or the guarantor or a business combination, acquisition or divestiture. We may at any time be engaged in discussions concerning, or otherwise acting in furtherance of, such transactions, which may be material.

The Notes will be subject to specific restrictions on transfer.

The Notes are being offered in reliance upon an exemption from registration under the Securities Act and applicable state securities laws of the United States. As such, the Notes may be transferred or resold only in a transaction registered under or exempt from the Securities Act and applicable U.S. state securities laws. These restrictions on transfer may have a material adverse effect on the ability of any holder of the Notes to transfer such Notes.

Investors may experience difficulties in enforcing civil liabilities.

Deutsche Telekom AG is incorporated in Germany and Finance is organized in The Netherlands. The majority of their directors and management (and certain of the parties named in this document) reside outside the United States, and all, or a substantial portion of, Deutsche Telekom AG's, Finance's and such persons' assets are located outside the United States. As a result, it may not be possible for investors to effect service of process upon Deutsche Telekom AG, Finance or such persons within the United States, or to enforce against Deutsche Telekom AG, Finance or such persons in the United States judgments obtained in the U.S. courts, including judgments predicated upon the civil liability provisions of the federal securities laws of the United States.

Corporate Disclosure in Germany may differ from that in the United States.

There may be less publicly available information about German public companies, such as Deutsche Telekom, than is regularly made available by public companies in the United States and in other jurisdictions. In 2010, we delisted our American Depositary Shares from the New York Stock Exchange and deregistered with the U.S. Securities and Exchange Commission ("SEC") all of our securities, including our equity securities and all classes of debt securities issued by Finance and guaranteed by Deutsche Telekom. Finance also deregistered all classes of its securities with the SEC.

USE OF PROCEEDS

We estimate the net proceeds from the sale of the Notes to be approximately $1,737,893,120 after deducting from the gross proceeds underwriting commissions and other expenses of the offering payable by us. We intend that the net proceeds will be used for general corporate purposes.

CAPITALIZATION AND INDEBTEDNESS

Deutsche Telekom

The following table sets forth, on a consolidated basis, the cash and cash equivalents, current financial indebtedness, non-current financial indebtedness, shareholders' equity and capitalization of Deutsche Telekom and its consolidated subsidiaries in accordance with IFRS, as adopted for use in the EU by the European Commission, as of March 31, 2018 and as adjusted to reflect the proposed sale of the Notes in this offering.

	As of March 31, 2018	
	Actual	**As adjusted**
	(millions of €)	
	(Unaudited)	
Cash and cash equivalents	**3,618**	**5,029**[4, 5]
Current financial indebtedness		
Bonds and other securitized liabilities	3,020	3,020
Liabilities to banks	2,354	2,354
Finance lease liabilities	768	768
Liabilities to non-banks from promissory notes	204	204
Other interest-bearing liabilities	1,274	1,274
Other non-interest-bearing liabilities	1,228	1,228
Total current financial indebtedness[1]	**8,849**	**8,849**
Non-current financial indebtedness		
Bonds and other securitized liabilities	41,241	42,661[4, 6]
Liabilities to banks	3,635	3,635
Finance lease liabilities	1,757	1,757
Liabilities to non-banks from promissory notes	332	332
Other interest-bearing liabilities	573	573
Other non-interest-bearing liabilities	98	98
Total non-current financial indebtedness[1, 2]	**47,636**	**49,056**
Shareholders' equity:		
Issued capital	12,189	12,189
Capital reserves	54,761	54,761
Other shareholders' equity[3]	(23,258)	(23,258)
Total shareholders' equity	**43,691**	**43,691**
Total capitalization	**96,558**	**96,567**[7]

1 Composed of "Bonds and other securitized liabilities", "Liabilities to banks", "Finance lease liabilities", "Liabilities to non-banks from promissory notes", "Other interest-bearing liabilities" and "Other non-interest-bearing liabilities" as stated in the condensed consolidated interim financial statements as of and for the three-month period ended March 31, 2018. All current and non-current financial indebtedness is unsecured.

2 In accordance with Postreform II (§ 2 (4) of the Post Transformation Act – *Postumwandlungsgesetz*), the Federal Republic is guarantor of all of Deutsche Telekom's liabilities which were outstanding at January 1, 1995. At March 31, 2018, this figure was a nominal EUR 1.8 billion.

3 Composed of "Treasury shares", "Retained earnings including carryforwards", "Total other comprehensive income", "Net profit (loss)" and "Non-controlling interests" as stated in the condensed consolidated interim financial statements as of and for the three-month period ended March 31, 2018.

4 The Euro equivalent of the Notes offered hereby is based on a U.S. dollar/Euro exchange rate of USD 1.2321 = EUR 1.00 as of March 31, 2018, as published by the European Central Bank.

5 After deducting from the gross proceeds from the proposed sale of the Notes in this offering underwriting commission and other expenses relating to the offering payable by Deutsche Telekom. See "*Use of Proceeds*".

6 For simplification purposes, the adjusted figure reflects the respective liabilities at their aggregate principal amount, not their values as calculated (in accordance with IFRS) using the effective interest rate method.

7 The adjustment has been calculated before consideration of potential tax effects (in particular deferred taxes).

On June 1, 2018, the Group issued a total of EUR 2.9 billion aggregate principal amount of bonds under its debt issuance programme, comprising EUR 0.5 billion aggregate principal amount of 0.625% Notes due 2022, EUR 1.0 billion aggregate principal amount of 1.375% Notes due 2025, EUR 1.0 billion aggregate principal amount of 2.000% Notes due 2029 and EUR 0.4 billion aggregate principal amount of Floating Rate Notes due 2022. There has been no other material change in the capitalization of Deutsche Telekom since March 31, 2018.

Deutsche Telekom International Finance B.V.

The following table shows the capitalization of Finance in accordance with IFRS, as adopted for use in the EU by the European Commission, as of March 31, 2018 and as adjusted to reflect the proposed sale of the Notes in this offering.

	As of March 31, 2018	
	Actual	**As adjusted**
	(millions of €)	
	(Unaudited)	
Cash and cash equivalents	0	0
Current financial liabilities[1]	**1,128**	**1,128**
Non-current financial liabilities[1]		
Bonds and other securitized liabilities	30,062	31,483[2, 3]
Liabilities to banks	0	0
Total non-current financial liabilities	**30,062**	**31,483**
Shareholder's equity:	**245**	**245**
Total capitalization	**31,435**	**32,855**[4]

1 All current and non-current financial liabilities are guaranteed and unsecured.
2 The Euro equivalent of the Notes offered hereby is based on a U.S. dollar/Euro exchange rate of USD 1.2321 = EUR 1.00 as of March 31, 2018, as published by the European Central Bank.
3 For simplification purposes, the adjusted figure reflects the respective liabilities at their aggregate principal amount, not their values as calculated (in accordance with IFRS) using the effective interest rate method.
4 The adjustment has been calculated before consideration of potential tax effects (in particular deferred taxes).

On June 1, 2018, the Group issued a total of EUR 2.9 billion aggregate principal amount of bonds under its debt issuance programme, comprising EUR 0.5 billion aggregate principal amount of 0.625% Notes due 2022, EUR 1.0 billion aggregate principal amount of 1.375% Notes due 2025, EUR 1.0 billion aggregate principal amount of 2.000% Notes due 2029 and EUR 0.4 billion aggregate principal amount of Floating Rate Notes due 2022.There has been no other material change in the capitalization of Finance since March 31, 2018.

DESCRIPTION OF OUR BUSINESS AND OPERATIONS

Group Organization

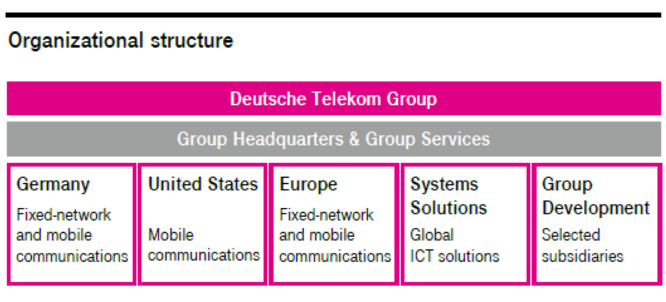
Overview of Business Activities

With approximately 168 million mobile customers, 28 million fixed-network and 19 million broadband lines (each as of December 31, 2017), 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 information and communication technology ("ICT") solutions for our business and corporate customers. We have an international focus and are represented in more than 50 countries. In the first quarter of 2018, we generated around 66.6% of our net revenue, amounting to EUR 12.6 billion, outside of our home market of Germany. As of March 31, 2018, we had 216, 926 employees ("FTEs").

The 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 operators, or "MVNOs"). Drawing on a global infrastructure of data centers and networks, our corporate customer arm, T-Systems, operates ICT systems for multinational corporations and public-sector institutions.

Organization

Our financial reporting conforms with our Group strategy and is based on the following organizational structure. Our Group is divided into five operating segments, plus our non-operating Group Headquarters & Group Services segment, which we describe in detail below:



- *Germany:* This operating segment comprises all fixed-network and mobile activities for consumers and business customers in Germany. In addition, it provides wholesale telecommunications services for the Group's other operating segments. The organization for consumers and business customers and for customer services was 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 in Germany 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 of January 1, 2018, we integrated Vivento Customer Services GmbH, a provider of call center services, into our Germany operating segment; previously it was part of our Group & Group Services segment. We believe that our Germany operating segment offers its customers an individual service and product portfolio that is innovative while at the same time secure and simple.

- *United States:* This operating segment combines all mobile activities in the U.S. T-Mobile US is the third largest mobile 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 due largely to 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. In April 2018, T-Mobile US and Sprint announced the conclusion of a binding agreement to combine the companies, the completion of which will further strengthen our position in the U.S. market (*see – Significant Corporate Transactions*)

- *Europe:* This 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. Our announced acquisition of the cable network operator UPC Austria will help us transform our subsidiary in Austria into a fully integrated provider. In addition to our 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 International Carrier Sales & Solutions unit ("ICSS", the main part of our international wholesale business, remains within our European operating segment). As part of our international wholesale business, we sell wholesale telecommunications services to our operating segments, as well as to third parties.

- *Systems Solutions:* 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.

- *Group Development*: 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 plc ("BT") (which we transferred in March 2018 to Deutsche Telekom Trust e.V., where it will be used as plan assets to cover our pension obligations) 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 intend 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 further strategic development. The management teams maintain an intensive dialog with the segment 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:* 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. This new Board department is part of the Group Headquarters & Group Services segment.

For more information on our operating segments please refer to "*Description of Our Business and Operations*" and "*Development of the Business in the Operating Segments*" and Note 31 "*Segment reporting*" to the consolidated financial statements as of and for the year ended December 31, 2017 incorporated by reference in this offering memorandum.

The principal subsidiaries of Deutsche Telekom AG are listed in the notes to the consolidated financial statements as of and for the year ended December 31, 2017 in the section "*Summary of accounting policies*" under "*Principal subsidiaries*". In addition to Deutsche Telekom AG, 60 German and 186 foreign subsidiaries are fully consolidated in our consolidated financial statements as of and for the year ended December 31, 2017 (December 31, 2016: 61 and 188). In addition, 9 associates and 7 joint ventures are included using the equity method (December 31, 2016: 13 and 7).

Significant Corporate Transactions

T-Mobile US and Sprint Merger

On April 29, 2018, together with their respective majority shareholders Deutsche Telekom AG and Softbank K.K. ("Softbank"), T-Mobile US and Sprint Corporation("Sprint") concluded a binding agreement to combine their companies. Sprint Corporation, including its consolidated subsidiaries, is a communications company in the U.S. offering a comprehensive range of wireless and wireline communications products and services that are designed to meet the needs of individual consumers, businesses, government subscribers and resellers. Its services are provided through ownership of extensive wireless networks, an all-digital global wireline network and a Tier 1 Internet backbone. Sprint offers wireless and wireline services to subscribers in all 50 U.S. states, Puerto Rico, and the U.S. Virgin Islands under the Sprint corporate brand, which includes the retail brands of Sprint ® , Boost Mobile ® , Virgin Mobile ® , and Assurance Wireless ® on the wireless networks utilizing various technologies including third generation (3G) code division multiple access (CDMA), and fourth generation (4G) services utilizing Long Term Evolution (LTE). Sprint utilizes these networks to offer its wireless subscribers differentiated products and services through the use of a single network or a combination of these networks.

Under the Business Combination Agreement, T-Mobile US will acquire all of the shares in Sprint. In return for every 9.75 Sprint shares, Sprint's existing shareholders will receive one new T-Mobile US share without any additional cash contribution. On completion of the Transactions, Deutsche Telekom will hold around 42% of T-Mobile US' shares and Softbank around 27% of T-Mobile US's shares, while the free float will account for about 31%. Deutsche Telekom and Softbank have further agreed to conclude a proxy agreement upon the closing of the Transactions which provides for Deutsche Telekom being able to vote all shares in T-Mobile US held by Softbank. This arrangement in respect of the T-Mobile US shares, along with the relevant corporate governance rules, means that Deutsche Telekom will continue to consolidate T-Mobile US in its financial statements. After the Transactions, T-Mobile US plans to achieve cost and capital expenditure synergies of around USD 43 billion in cash (after integration costs) within three to four years. Around USD 15 billion has been budgeted for integration costs. The ratio of net debt to adjusted EBITDA (*see* –"*Special Note on Non-GAAP Financial Measures*") for Deutsche Telekom is expected to exceed the target corridor of 2.0x to 2.5x as a result of the Transactions. However, we expect strong cash flow generation at T-Mobile US in the coming years, which would return the ratio to the target corridor by 2021. Following the announcement of the Transactions, the rating agency Moody's maintained Deutsche Telekom's rating at BBB+, but downgraded the stable outlook to negative. Standard & Poor's maintained it at BBB+ with a CreditWatch negative outlook, while Fitch confirmed the current BBB+ rating and stable outlook. The Transactions are subject to approval by antitrust and other authorities, to the approval of the T-Mobile US and Sprint shareholders, to the occurrence of material adverse effects as described in the Business Combination Agreement and to other closing conditions. One of the conditions relating to material adverse changes provides that none of the parties to the Transactions are required to take any of the actions described in the Agreement to bring about the consummation of the transaction if, among other things, that action would cause a loss, cost or diminution in value of $7 billion or more to T-Mobile US, Sprint or their respective subsidiaries following closing of the Transactions. The Business Combination Agreement also contains representations and warranties and covenants customary for a transaction of this nature.

Sprint and SoftBank, and T-Mobile US and Deutsche Telekom, are each subject to restrictions on their ability to solicit alternative acquisition proposals and to provide information to, and engage in discussion with, third parties regarding such proposals, except under limited circumstances to permit Sprint's and T-Mobile's boards of directors to comply with their respective fiduciary duties. Subject to certain exceptions, each of the parties has agreed to use its reasonable best efforts to take or cause to be taken actions necessary to consummate the Transactions, including with respect to obtaining required government approvals. The Business Combination Agreement also contains certain termination rights for both Sprint and T-Mobile. For example, in the event that T-Mobile terminates the Business Combination Agreement in connection with a failure to satisfy the closing condition related to the specified minimum credit ratings noted above, then in certain circumstances, T-Mobile may be required to pay Sprint $600 million.

Other Significant Corporate Transactions

Following approval by the German Federal Cartel Office (*Bundeskartellamt*), we completed the sale of our hosting service provider Strato AG to United Internet for a purchase price of EUR 0.6 billion effective midnight March 31, 2017.

We completed the sale of DeTeMedien to a consortium of medium-sized publishers on June 14, 2017. The purchase price comprised 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% 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% 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 in the Dutch market. Tele2 Group receives a purchase price in the form of a 25.0% 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, subject to 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 including working capital adjustments. In line with our strategy, this acquisition will allow us to offer convergent product bundles to our customers in the European market. We expect the transaction to close in the second half of 2018, subject to approval by the antitrust authority and the City of Vienna.

As part of the share buy-back program launched by T-Mobile US at the end of 2017 – which will run until the end of 2018 and under which ordinary shares in the company totaling up to USD 1.5 billion could be repurchased. Ordinary shares in the amount of USD 1.1 billion had been bought back as of March 31, 2018. Of this amount, USD 0.7 billion (EUR 0.5 billion) is attributable to the first quarter of 2018. In addition, in the first quarter of 2018 Deutsche Telekom purchased shares in T-Mobile US on the open market totaling USD 0.2 billion (EUR 0.2 billion). As a result, Deutsche Telekom holds around 63% of the shares in T-Mobile US as of the date of this offering memorandum.

In March 2018, Deutsche Telekom exercised its right of first refusal as invited by the Greek privatization authority Hellenic Republic Asset Development Fund (HRADF) and acquired a 5% stake in its Greek subsidiary OTE. The transaction closed on May 30, 2018, with Deutsche Telekom purchasing additional shares in the amount of EUR 284 million, and subsequently holding around 45% of the shares in OTE.

The Telecommunications Market

Worldwide, the market for ICT grew by 4.0% in 2017 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 Federal Association for Information Technology, Telecommunications and New Media ("Bitkom"), which is an association of high tech industry participants, and the European Information Technology Observatory ("EITO") expect the telecommunications market segment (services and equipment) to record an increase of 4.0% worldwide to EUR 1.82 trillion and the information technology ("IT") market segment to record an increase of 3.9% for 2017. In the European Union, revenue in the telecommunications market segment rose by 1.0%, primarily due to the capex-driven 5.0% increase in equipment. The European Telecommunications Network Operators' Association ("ETNO") determined that service revenues in the EU telecommunications market have grown slightly by 0.8% compared with 2016 to EUR 260 billion in 2017. Radical regulatory interventions, such as the reduction in the European roaming and national termination rates as well as substitution by over-the-top ("OTT") players, like WhatsApp and Facebook, 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 the existing market structures on the one hand, and the market realities of many industries that have previously been exclusively analog on the other. 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 performance standards and security are critical to success for many applications.

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 Federal Cartel Office (*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 O_2. 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% stake in Telecom Italia to the TV service provider Persiderain.

Germany

According to EITO, revenue from IT products and services, telecommunications, and consumer electronics increased by 2.3% to around EUR 135.6 billion in Germany in 2017. Information technology recorded growth of 4.3%. Telecommunications revenues (telecommunications services, hardware, and infrastructure systems) increased by 0.3% to around EUR 57.7 billion. The positive development in data services could not completely offset weakening activities in 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.

We estimate that the German broadband market grew by 3.5% in 2017. At December 31, 2017, there were around 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 2017, with more and more providers expanding their portfolios. We launched our first integrated offering, MagentaEins (corresponding to our MagentaOne outside Germany), 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.

In the German mobile market, we estimate that mobile service revenues decreased slightly by around 0.7% 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 continues to progress, and as a result there is 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 are needed in order to meet these demands. We believe that the M2M sector alone grew by around 30% in 2017, and this growth is unlikely to slow in the coming years. In the IT sector, we expect market growth to be around 5%, driven primarily by the substantial increase in cloud services of around 17%.

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, Comcast has already begun offering Xfinity Mobile to its customers (nearly 600,000 subscriptions as of March 31, 2018, with continued subscriber growth expected), and Charter is expected to launch Spectrum Mobile in summer 2018. Both services use their respective Wi-Fi footprints when available, falling back on Verizon's LTE network when necessary. Additionally, in April 2018, the two companies announced a wireless backend partnership that will support mobile-related customer sales and support, billing, and device logistics and warehousing. Altice, whose 2016 acquisitions of Cablevision and Suddenlink created the nation's fourth largest cable operator, announced its own MVNO partnership with Sprint in November 2017, and is planning to launch by 2019. Incumbent facilities-based carriers continue to diversify their holdings, as well, with T-Mobile closing its acquisition of Layer3 TV in January 2018. We also note the positive decision of the DC federal district court in June

2018 on AT&T's 85.4 billion acquisition of media giant Time Warner, Inc. 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. Generally, operators are prepping for 5G strategies in 2018/19.

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 its network, as well as successful implementation of the "Un-carrier" initiatives, which contributed very successfully to customer satisfaction. T-Mobile US and Sprint Corporation on April 29 announced their intent to merge in an all-stock transaction at a fixed exchange ratio of 0.10256 T-Mobile shares for each Sprint share or the equivalent of 9.75 Sprint shares for each T-Mobile US share. Closing is targeted for 1H2019, pending the necessary approvals from the US authorities (see *"Description of Our Business and Operations— Significant Corporate Transactions— T-Mobile US and Sprint Merger"*.

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. An auction of licenses in the 28 GHz spectrum band is scheduled to start on November 14, 2018. Upon conclusion of the auction in the 28 GHz band, the FCC plans to commence the allocation of licenses in the 24 GHz band. 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, new rules will go into effect on June 11, 2018 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 new rules are being 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 2017 (*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 players, like WhatsApp and Facebook, are increasingly replacing traditional voice and messaging services.

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.

Systems Solutions

In the 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% in 2017 to EUR 192 billion. However, this trend impacted the business areas of the market in very different ways.

In the telecommunications ("TC") segment, the market has continued to be 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), 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 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%. By contrast, the market for consultation and integration services for cloud solutions grew by 28%.

The market for outsourcing computing and desktop services ("CDS") shrank by 0.6% in 2017 to EUR 58 billion. Two contrasting trends played a role in this context: business from long-term, rather traditional outsourcing contracts declined by 4%, while the market for cloud computing grew by 10%.

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 Strategy

The strategies and expectations referred to in the following discussions are considered forward-looking statements and may be strongly influenced or changed by shifts in market conditions, new initiatives we implement and other factors. We cannot provide assurance that the strategies and expectations referred to in these discussions will come to fruition. Please refer to "Forward-Looking Statements" and "Risk Factors" for descriptions of some of the factors relevant to these discussions and other forward-looking statements in this offering memorandum.

Development of the Group's Strategy

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. We see ourselves as a driving force for a modern and competitive digital Europe.

This strategy has proved very successful: In terms of market capitalization, we are currently one of Europe's highest value telecommunications companies (as of March 31, 2018). In the 2017 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:

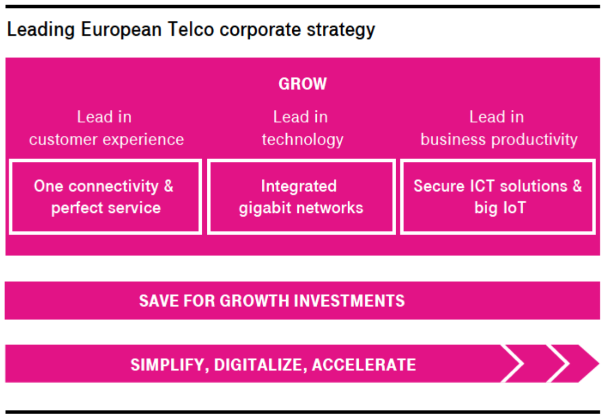
- New technologies, such as virtual, voice-activated assistants from Google, Amazon and Apple are creating entirely new usage scenarios and permanently changing the way our customers use the Internet.

- 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 IoT 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 we face 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 seek to create the foundation for future organic growth. We believe that we need to grow to 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.



Strategic Areas of Operation

<u>One connectivity & perfect service</u>

We intend to offer our customers a seamless and technology-neutral telecommunications experience. We therefore market fixed-network and mobile communications in one convergent product (fixed-mobile convergence or FMC). By March 31, 2018, some 3.8 million customers in Germany had opted for MagentaEins; that is more than 0.2 million more than in the prior year. The integrated national companies of our Europe operating segment won some 2.4 million customers for MagentaOne and similar FMC offerings as of March 31, 2018. 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. Since 2017, the offer has also included exclusive TV series such as The Handmaid's Tale, Valkyrien, and Cardinal, and our unique Telekom Sport offering. In 2017, 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 intend to 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 strive to set ourselves apart from our competitors with perfect customer service: T-Mobile US leads the competition in numerous surveys. We believe this to be 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 (negative) and plus 134 points (positive). In 2017, 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. We are therefore 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.

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 intend to be able to offer approximately 80% 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% 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.

In mobile communications, we believe that 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% of the population with LTE by the end of 2018; in our European national companies, coverage is to reach between 89% and 99%. Thanks to the successful conclusion of the spectrum auction in April, T-Mobile US will also further improve its national LTE coverage.

We intend to continue to drive forward seamless integration of fixed and mobile networks with the fifth-generation mobile communications standard (5G). To this end, we plan to decouple network functions 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.

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.

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	–

Main spectrum awards

					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.

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%. Since we desire to consolidate and build on this position of strength, we have co-founded the Next Generation Enterprise Network Alliance (“ngena”), 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 intend to manage our Systems Solutions operating segment on a portfolio basis going forward and set up an integrated sales organization. We also plan to 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% 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 IoT. 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 M2M connectivity create the basis for cost-effective and energy-efficient networking. For example, since July 2016, BMW has fitted all its vehicles in 65 countries with 4G connectivity from Deutsche Telekom. In addition, we intend to 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.

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.

Supporting Areas of Operation

The supporting areas of operation provide the framework for our internal activities.

Save for growth investments

Future growth requires adequate investment. We believe that strict cost discipline enables us to generate the funds we need to finance this investment and safeguard our competitiveness. We therefore intend to systematically continue on this path of cost transformation. In the long term, we seek 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. In December 2017, T-Mobile US announced the acquisition of online TV provider Layer3 TV, which was closed on January 22, 2018.

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. Therefore, in 2017, 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.

Finance Strategy

We announced a new finance strategy at our May 2018 Capital Markets Day. Part of our finance strategy is undisputed access to the debt capital markets, including a relative debt (ratio of net debt to adjusted EBITDA between 2-2.5x) and equity ratio of 25-35%, along with a liquidity reserve that covers our maturities of the coming 24 months at least. While we expect our relative debt to rise above our target in the short term, we intend to maintain our rating in a corridor from A- to BBB and safeguard undisputed access to the capital market.

We seek to maintain a consistent dividend policy for shareholders, which is subject to approval by the relevant bodies and the fulfilment of other legal requirements. We intend to pay a dividend of EUR 0.70 per dividend-bearing share for the 2018 financial year. From 2019, we intend our dividend to reflect growth in adjusted EPS, and we will consider buybacks of DT stock or a TMUS stake increase if excess cash is available. The dividend floor remains at €0.50 per share.

Capital expenditures remain focused on supporting our fixed and mobile network rollout . We expect our total capital expenditure to remain high in the next few years, with expenditures outside the United States to peak in 2018. We intend to use our investment resources 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, we intend our infrastructure build-out to focus on the latest LTE standard, and in the fixed network, on optical fiber and vectoring.

The finance strategy is intended to support our Group strategic goal of transforming our Group into the Leading European Telco. In order to generate a sustainable increase in value, we intend to earn in excess of 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 shift T-Mobile US to a financing model in which a larger portion of its funding comes from third party sources.

We also intend to achieve our target of earning our cost of capital through strict cost discipline including €1.5 bn of net indirect cost reduction outside of the U.S. Our three main pillars of indirect cost reduction are internal workforce costs by automation and operational excellence, external workforce costs by automation and operational excellence, and non-headcount OPEX: real-estate, platform retirements, shared service savings, procurement improvements. Improvements like this are intended to ensure our viability on unadjusted EBIT. Additionally, taking capital expenditure into consideration supports our rigorous focus on the efficient allocation of capital at the Deutsche Telekom Group.

DEVELOPMENT OF OUR BUSINESS

You should read the following discussion in conjunction with our annual consolidated financial statements as of and for the year ended December 31, 2017 and 2016, including the notes to those consolidated financial statements, as well as condensed consolidated interim financial statements as of and for the three-month period ended March 31, 2018, including the notes to those condensed consolidated interim financial statements, which are incorporated by reference in this offering memorandum. Our consolidated financial statements and condensed consolidated interim financial statements prepared in accordance with IFRS are dependent upon and sensitive to accounting methods, assumptions and estimates that we use as bases for the preparation of our consolidated financial statements and condensed consolidated interim financial statements. For more information on these critical accounting estimates, see "Summary of accounting policies—Judgments and estimates" in the notes to our consolidated financial statements. For more information on EBITDA, adjusted EBITDA, free cash flow and net debt, please see "Special Note on Non-GAAP Financial Measures", which appears elsewhere in this offering memorandum.

The strategies and expectations referred to in the following discussions are considered forward-looking statements and may be strongly influenced or changed by shifts in market conditions, new initiatives we implement and other factors. We cannot provide assurance that the strategies and expectations referred to in these discussions will come to fruition. Forward-looking statements are based on current plans, estimates and projections, and therefore, you should not place too much reliance on them. Forward-looking statements speak only as of the date they are made, and we undertake no obligation to update any forward-looking statements in light of new information or future events. Forward-looking statements involve inherent risks and uncertainties, most of which are difficult to predict and are generally beyond our control. We caution you that a number of important factors could cause actual results or outcomes to differ materially from those expressed in, or implied by, the forward-looking statements. Please refer to "Forward-Looking Statements" and "Risk Factors" for descriptions of some of the factors relevant to these discussions and other forward-looking statements in this offering memorandum.

Consolidated Results of Operations

The following tables present information concerning our consolidated income statements for the periods indicated.

	For the three months ended March 31,		
	2018[1]	2017	2018/2017
	(millions of €)		(% change)
	(unaudited)		
Net revenue	**17,924**	**18,646**	**(3.9)**
Of which: interest income calculated using the effective interest method	1	n.a.	n.a.
Other operating income	373	770	(51.6)
Changes in inventories	1	40	(97.5)
Own capitalized costs	559	542	3.1
Goods and services purchased	(8,718)	(9,312)	6.4
Personnel costs	(4,057)	(3,964)	(2.3)
Other operating expenses	(813)	(761)	(6.8)
Impairment losses on financial assets	(106)	n.a.	n.a.
Gains (losses) from the write-off of financial assets measured at amortized cost	(10)	n.a.	n.a.
Other	(697)	(761)	8.4
Depreciation, amortization and impairment losses	(3,097)	(3,191)	2.9
Profit from operations (EBIT)	**2,171**	**2,771**	**(21.7)**
Finance costs	(422)	(637)	33.8
Interest income	68	75	(9.3)
Interest expense	(490)	(713)	31.3
Share of profit (loss) of associates and joint ventures accounted for using the equity method	69	4	n.a.
Other financial income (expense)	(58)	(1,406)	95.9
Profit (loss) from financial activities	**(411)**	**(2,040)**	**79.9**
Profit (loss) before income taxes	**1,760**	**731**	**n.a.**
Income taxes	(494)	78	(733.3)
Profit (loss)	**1,266**	**809**	**56.5**
Profit (loss) attributable to owners of the parent (net profit (loss))	992	747	32.8
Profit (loss) attributable to non-controlling interests	274	62	n.a.

n.a. – not applicable

1 The new accounting standards IFRS 15 "Revenue from Contracts with Customers" and IFRS 9 "Financial Instruments" took effect as of January 1, 2018. Prior-year figures were not adjusted. For more information, see "*Accounting Policies*" in the notes to our condensed consolidated interim financial statements as of and for the three-month period ended March 31, 2018, incorporated by reference in this offering memorandum.

	For the years ended December 31,				
	2017	2016	2015	2017/2016	2016/2015
	(millions of €)			(% change)	
	(audited)			(unaudited)	
Net revenue	**74,947**	**73,095**	**69,228**	**2.5**	**5.6**
Other operating income	3,819	4,180	2,008	(8.6)	n.a.
Changes in inventories	21	(12)	(11)	n.a.	(9.1)
Own capitalized costs	2,292	2,112	2,041	8.5	3.5
Goods and services purchased	(38,161)	(37,084)	(35,706)	(2.9)	(3.9)
Personnel costs	(15,504)	(16,463)	(15,856)	5.8	(3.8)
Other operating expenses	(3,444)	(3,284)	(3,316)	(4.9)	1.0
Depreciation, amortization and impairment losses	(14,586)	(13,380)	(11,360)	(9.0)	(17.8)
Profit from operations (EBIT)	**9,383**	**9,164**	**7,028**	**2.4**	**30.4**
Finance costs	(2,197)	(2,492)	(2,363)	11.8	(5.5)
Interest income	320	223	246	43.5	(9.3)
Interest expense	(2,517)	(2,715)	(2,609)	7.3	(4.1)
Share of profit (loss) of associates and joint ventures accounted for using the equity method	76	(53)	24	n.a.	n.a.
Other financial income (expense)	(2,269)	(2,072)	89	(9.5)	n.a.
Profit (loss) from financial activities	**(4,390)**	**(4,617)**	**(2,250)**	**4.9**	**n.a.**
Profit before income taxes	**4,994**	**4,547**	**4,778**	**9.8**	**(4.8)**
Income taxes	558	(1,443)	(1,276)	n.a.	(13.1)
Profit (loss)	**5,551**	**3,104**	**3,502**	**78.8**	**(11.4)**
Profit (loss) attributable to owners of the parent (net profit (loss))	3,461	2,675	3,254	29.4	(17.8)
Profit (loss) attributable to non-controlling interests	2,090	429	248	n.a.	73.0

n.a. – not applicable

One of the factors that causes period to period changes in our revenues and expenses is movement in exchange rates. In the following discussion, we use the term "exchange rate effects" to explain the variability caused by these movements. We calculate the effects of changes in exchange rates by multiplying the revenue and expense amounts in local currencies by the exchange rates in effect for the prior year to derive a constant currency revenue or expense amount. We then subtract this figure from the euro-denominated amount obtained from multiplying the current year revenue and expense amounts in local currency by the current year exchange rates. The difference between the two amounts is the currency or exchange rate effect.

Factors Affecting the Comparability of Results

Initial Application of IFRS 15

The new accounting standard IFRS 15 "Revenue from Contracts with Customers" took effect as of January 1, 2018. Prior-year figures were not adjusted.

IFRS 15 introduces an amended model for determining and recognizing revenue. The effects of the new regulations on our operating segments differ depending on the underlying business model and, for the most part, neutralize each other. For example, in our Germany operating segment – where the sale of subsidized handsets in combination with service contracts is still customary – the amortization of capitalized contract assets reduces revenue to a minor extent. In our United States operating segment – where customers are predominantly offered payment-by-installment models or leased models – the capitalization of customer acquisition costs and their distribution over the average customer retention period have a slightly positive impact on EBITDA.

Without the effect of IFRS 15, revenue in the first quarter of 2018 would have amounted to EUR 18.0 billion, EUR 0.1 billion higher than reported. This effect is attributable mainly to amortization of the contract assets/liabilities recognized in the statement of financial position over the (remaining) contract period in the first quarter of 2018. This amortization is recognized as a reduction or an increase in revenue. It also includes, in the indirect sales channel, reimbursements for handset subsidies granted by third-party retailers that are included in commission payments to these retailers and which are no longer recognized as an expense, but as a reduction of the service revenues over the contract term.

Adjusted for the effects of IFRS 15, goods and services purchased and personnel costs in the first quarter of 2018 would have been EUR 8.8 billion and EUR 4.1 billion, respectively, and thus have been a total of EUR 0.2 billion higher. This effect is attributable the capitalization of expenses for sales commissions, which, under IAS 18/IAS 11, would have been recognized immediately in profit or loss either under goods and services purchased (dealer commissions) or personnel costs (employee commissions). It was only partially offset by the amortization of capitalized expenses for sales commissions in the first quarter of 2018.

For further information, see "*Accounting Policies*" in the notes to our condensed consolidated interim financial statements as of and for the period ended March 31, 2018, incorporated by reference in this offering memorandum.

Changes in Reportable Segments

As of January 1, 2018, we assigned Vivento Customer Services GmbH, a provider of call center services which was previously part of our Group Headquarters & Group Services segment, to our Germany operating segment. Comparative figures for the first quarter of 2017 have been adjusted retrospectively in segment reporting.

Since January 1, 2017, the newly established Board of Management department Technology and Innovation, which comprises the Innovations, Telekom IT, and Technology units formerly assigned to the Germany, Europe, and Systems Solutions operating segments, has been reported on in the Group Headquarters & Group Services segment.

Since January 1, 2017, we have also included in our segment reporting the Group Development operating segment, which actively manages and aims to increase the value of selected subsidiaries and equity investments of the Group. The following units and subsidiaries have been included in the Group Development operating segment: T-Mobile Netherlands (previously reported in the Europe operating segment), Deutsche Funkturm (DFMG, previously reported in the Germany operating segment), Deutsche Telekom Capital Partners (DTCP), the stakes in BT (which we transferred in March 2018 to Deutsche Telekom Trust e.V., where it will be used as plan assets to cover our pension obligations) 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 reported in the Group Headquarters & Group Services segment). The Group functions of Mergers & Acquisitions and Strategic Portfolio Management have also been assigned to Group Development. Comparative figures have been adjusted retrospectively in segment reporting.

Due to the changes in our reportable segments implemented as of January 1, 2017 described above, the comparative figures for 2016 and 2015 included in our reportable segments for the 2017 financial year have been adjusted retrospectively in segment reporting. When discussing segment results below in "*Development of Business in the Group*" we refer throughout the discussion to these restated numbers, *i.e.*, segment results for 2016 and 2015 are presented on the 2017 basis. However, in the discussion under "*Development of Business in the Operating Segments*" below we present the discussion on 2017/2016 developments on the 2017 basis and the discussion on 2016/2015 developments on the 2016 basis, without restatement.

Effects of Changes in the Composition of the Group

Our business development in each of the periods presented was affected by changes in the composition of our Group, the most important of which are described below.

- *Acquisition of Layer3 TV Inc.* On November 9, 2017, T-Mobile US signed an agreement to acquire 100 percent of the shares in online TV provider Layer3 TV, Inc. The agreement includes a cash purchase price of around USD 325 million. The transaction was completed on January 22, 2018.

- *Sale of shares in Scout24 AG.* With accounting effect from June 23, 2017, we placed our entire direct stake of 9.26 percent in Scout24 AG in the market at a price of EUR 32.20 per share. The sale resulted in proceeds of EUR 0.3 billion and income from divestitures of EUR 0.2 billion attributable to the sale was disclosed under other operating income in our consolidated financial statements as of and for the year ended December 31, 2017.

- *Sale of DeTeMedien GmbH.* On June 14, 2017, we completed the sale of all our shares in DeTeMedien GmbH to a consortium of medium-sized publishers. By agreement, the purchase price remains confidential. It comprises a cash component as well as other elements, including 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.

- *Sale of Strato AG.* In December 2016, we reached an agreement with United Internet AG on the sale of hosting service provider Strato AG. The sale is in line with our strategy of selling off or finding partners for business areas that cannot be developed adequately within the Deutsche Telekom Group and, in doing so, potentially increasing their value. The sale was completed at a purchase price of EUR 0.6 billion effective midnight March 31, 2017 after approval was given by the German Federal Cartel Office (*Bundeskartellamt*). Income from divestitures of EUR 0.5 billion attributable to the sale was disclosed under other operating income in our consolidated financial statements as of and for the year ended December 31, 2017.

- *Sale of the EE joint venture*. After the British Competition and Markets Authority (CMA) had approved the sale of the EE joint venture to the UK company BT unconditionally and without remedies in January 2016, we and the French telecommunications provider Orange consummated the transaction on January 29, 2016 at a purchase price of GBP 13.2 billion. In return for our stake in the EE joint venture, we received a financial stake of 12.0 percent in BT and a cash payment of GBP 15.7 million. The sale generated income of EUR 2.5 billion in 2016. Around EUR 0.9 billion of this amount resulted from effects recognized directly in equity in prior years. In addition, on January 25, 2016, the shareholders received a final dividend totaling GBP 0.3 billion from the former EE joint venture, in which we participated with our capital share at that date of 50 percent. The financial stake in BT received in connection with this transaction was disclosed as available-for-sale financial assets under other financial assets. In March 2018, we transferred our financial stake in BT to Deutsche Telekom Trust e.V., where it will be used as plan assets to cover our pension obligations.

For more information on the effects of changes in the composition of the Group, please refer to the "*Significant Events and Transactions—Changes in the Composition of the Group, Transactions with Owners, and Other Transactions*" in the notes to our condensed consolidated interim financial statements as of and for the period ended March 31, 2018, to the "*Summary of Accounting Policies*" in the section on "*Changes in the Composition of the Group and Other Transactions*" in the notes to each of the consolidated financial statements as of and for the period ended December 31, 2017 and December 31, 2016, and to the "*Summary of Accounting Policies*" in the section "*Changes in the Composition of the Group, and Transactions with Owners, and Other Transactions*" in the notes to the consolidated financial statements as of and for the period ended December 31, 2015, in each case incorporated by reference in this offering memorandum.

Development of Business in the Group

Results of Operations of the Group

Net Revenue

The following tables present information concerning the contribution of our reportable segments to net revenue for the periods indicated.

	Q1 2018	Q1 2017	Change	
	(millions of €)			(%)
	(unaudited)			
Net revenue[1]	**17,924**	**18,646**	**(722)**	**(3.9)**
Germany[2]	5,325	5,397	(72)	(1.3)
United States	8,455	8,982	(527)	(5.9)
Europe	2,811	2,781	30	1.1
Systems Solutions	1,665	1,704	(39)	(2.3)
Group Development	528	595	(67)	(11.3)
Group Headquarters & Group Services[2]	651	735	(84)	(11.4)
Intersegment revenue	(1,511)	(1,547)	36	2.3

1 The net revenue figures presented above for the first three months of the 2018 and 2017 financial years correspond to the figures presented in the column under the heading "Total revenue" in the table "*Segment information in the first quarter*" contained in the section "*Other Disclosures—Segment Reporting*" in the condensed consolidated interim financial statements as of and for the period ended March 31, 2018 incorporated by reference in this offering memorandum, with the segment revenue figures presenting revenue of the respective segments prior to the elimination of intersegment revenue.

2 We assigned Vivento Customer Services GmbH, a provider of call center services, to our Germany operating segment as of January 1, 2018; previously it was part of our Group Headquarters & Group Services segment. Comparative figures have been adjusted retrospectively.

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

1 Adjusted retrospectively to reflect our reportable segments for the 2017 financial year (as reflected in our consolidated financial statements as of and for the year ended December 31, 2017). The figures therefore differ to the figures for the 2016 and 2015 financial years that are included in the discussions of the developments in the 2016 financial year under "*Development of Business in the Operating Segments*" below. For further information, see "*Factors Affecting the Comparability of Results—Changes in Reportable Segments*".

2 The net revenue figures presented above for the 2017, 2016 and 2015 financial years correspond to the figures presented in the column under the heading "Total revenue" in the table contained in Note 31 "*Segment Reporting*" to our consolidated financial statements as of and for the year ended December 31, 2017 incorporated by reference in this offering memorandum, with the segment revenue figures presenting revenue of the respective segments prior to the elimination of intersegment revenue.

3 Since January 1, 2017, we have included in our segment reporting the Group Development operating segment and, within the Group Headquarters & Group Services segment, the Board of Management department Technology and Innovation. Comparative figures for the 2016 and 2015 financial years have been adjusted retrospectively. For further information, see "*Factors Affecting the Comparability of Results—Changes in Reportable Segments*".

In the first quarter of 2018, we generated net revenue of EUR 17.9 billion, which was 3.9 percent, or EUR 0.7 billion, lower than the first quarter of 2017. The main factor in this decline was the exchange rate effects of translation from U.S. dollars into euros. Adjusted for these negative exchange rate effects, which totaled EUR 1.2 billion, and for the slightly negative effects of changes in the composition of the Group, revenue increased by EUR 0.5 billion, or 3.1 percent. In the first quarter of 2018, our United States operating segment again provided the largest contribution, at 47.2 percent, to net revenue of the Group. This was a decrease of 1.0 percentage point compared with the first quarter of 2017 and was mainly due to the negative exchange rate effects from the translation of U.S. dollars into euros mentioned above. As a result, the proportion of net revenue generated outside Germany decreased from 67.3 percent in the first quarter of 2017 to 66.6 percent in the first quarter of 2018.

- *United States.* In our United States operating segment, revenue – adjusted for exchange rate effects – rose substantially by 8.7 percent. This increase was due primarily to higher service revenues from the ongoing growth in customer numbers triggered by T-Mobile US's successful "Un-carrier" initiatives and to the success of the MetroPCS brand. Terminal equipment revenue also increased, in part due to higher average revenues per device sold.

- *Germany.* In our German home market, revenue contracted by a slight 1.3 percent. Adjusted for the effects of IFRS 15, total revenue was stable year-on-year, with revenue from mobile business rising marginally. Higher IT and broadband revenues had a positive impact on fixed-network revenue. However, this effect was not quite sufficient to fully offset the slight decrease in fixed-network revenue compared with the first quarter of 2017.

- *Europe.* At our Europe operating segment, revenue increased slightly by 1.1 percent compared to the first quarter of 2017, but was on par with the prior-year period when adjusted for exchange rate effects. Substantial revenue growth for B2B/ICT business customer operations and a similar trend in mobile business contributed positively, while intense competition in telecommunications markets, lower EU roaming charges and an overall decline in fixed-network revenue contributed negatively. Declines in wholesale business offset the positive revenue contribution of TV and broadband business.

- *System Solutions.* In the Systems Solutions operating segment, revenue decreased by 2.3 percent compared with the first quarter of 2017. This was mainly the result of lower revenue from traditional IT business, particularly for international corporate customers. By contrast, revenue from both telecommunications business and our strategic growth areas cloud, Internet of Things, and our new Telekom Security unit was positive.

- *Group Development.* Revenue generated by our Group Development operating segment decreased by 11.3 percent in the first quarter of 2018 compared to the first quarter of 2017, a decline largely attributable to forgone revenue following the deconsolidation of Strato AG as of March 31, 2017. Revenue declined at T-Mobile Netherlands, in part due to lower EU roaming charges and national termination rates.

- *Group Headquarters & Group Services.* In our Group Headquarters & Group Services segment, revenue declined by 11.4 percent compared to the first quarter of 2017, mainly due to the fact that since January 2016, the costs of intragroup development services newly commissioned from Deutsche Telekom IT in Germany were no longer charged internally.

In 2017, we generated net revenue of EUR 74.9 billion, which was an increase of 2.5 percent, or EUR 1.9 billion, compared to 2016. 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 AG – revenue even increased by EUR 2.6 billion, or 3.6 percent, compared to 2016. In the 2017 financial year, our United States operating segment provided the largest contribution, at 47.7 percent, to net revenue of the Group. This was an increase of 1.5 percentage points compared with 2016, 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 in 2016 to 67.2 percent in 2017.

- *United States.* Our United States operating segment contributed to this positive trend with revenue growth of 5.9 percent. T-Mobile US's 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.

- *Germany.* In our German home market, there was a slight positive trend in revenue, with an increase of 0.7 percent compared to 2016. 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.

- *Europe.* In the Europe operating segment, revenue also increased slightly, by 1.2 percent compared with 2016. Revenue development in our growth areas mobile data, broadband, TV and ICT 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.

- *System Solutions.* In the Systems Solutions operating segment, revenue decreased by 1.1 percent compared to 2016. 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 2016, however, our telecommunications business would have 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 the international level. Our strategic growth areas cloud, Internet of Things, and our new Telekom Security unit made a positive contribution.

- *Group Development.* 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 AG as of March 31, 2017. By contrast, revenue growth at T-Mobile Netherlands had a positive impact.

- *Group Headquarters & Group Services.* In our Group Headquarters & Group Services segment, revenue declined by 15.1 percent compared to 2016, mainly due to the fact that since January 2016, the costs of intragroup development services newly commissioned from Deutsche Telekom IT in Germany were no longer charged internally.

In the 2016 financial year, we generated net revenue of EUR 73.1 billion, which was a substantial increase of EUR 3.9 billion, or 5.6 percent, above the level in 2015. Adjusted for slightly negative net exchange rate effects and negative effects of changes in the composition of the Group of EUR 0.2 billion, revenue increased by EUR 4.1 billion, or 6.0 percent, compared to 2015. In the 2016 financial year, our United States operating segment provided the largest contribution, at 46.2 percent, to net revenue of the Group. This was an increase of 4.4 percentage points compared with 2015, 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 increased from 63.8 percent in 2015 to 66.3 percent in 2016.

- *United States.* The business development of our United States operating segment, which saw revenue increase by 16.6 percent, contributed substantially to this positive trend. T-Mobile US's successful "Un-carrier" initiatives gave a strong boost to the number of new customers and thus also to service revenues. Terminal equipment revenue also continued to rise, as customers increasingly chose to lease rather than purchase high-value terminal equipment in connection with the "JUMP! On Demand" business model introduced by T-Mobile US in June 2015.

- *Germany*. In our home market of Germany, revenue decreased by 1.7 percent, primarily due to lower revenue from non-contract mobile devices.

- *Europe*. In the Europe operating segment, revenue also decreased, by 2.1 percent compared to 2015, mainly as a result of the spin-off of the energy resale business in Hungary as of January 1, 2016. In addition, revenue continued to come under pressure from decisions by regulatory authorities, such as roaming regulations and reduced mobile termination rates, and persistently intense competition in the telecommunications markets in our national companies, especially in the Netherlands.

- *System Solutions*. Despite billing for the completion of the set-up phase of the toll collection system in Belgium in the first quarter of 2016, revenue in our Systems Solutions operating segment decreased 3.5 percent compared to 2015. In general, the downward price trend in ICT business had a negative effect on net revenue.

- *Group Headquarters & Group Services*. In our Group Headquarters & Group Services segment, revenue declined by 2.8 percent compared to 2015, mainly on account of revenue lost in connection with the sale of our online platform t-online.de and our digital marketing company InteractiveMedia in November 2015 as well as the realignment of the Group Innovation+ unit.

Our Group Development operating segment, which was included in our reportable segments only as of January 1, 2017, was not included in our reporting for the years 2016 or 2015.

Profit from Operations

In the first quarter of 2018, profit from operations decreased by 21.7 percent compared to the first quarter of 2017, from EUR 2.8 billion to EUR 2.2 billion. The decline was largely attributable to the non-recurrence of income of EUR 0.5 billion recorded in the first quarter of 2017 in connection with the deconsolidation of Strato, which was sold on March 31, 2017. In addition, special factors in connection with staff-related measures and non-staff-related restructuring expenses amounted to EUR 0.3 billion, EUR 0.2 billion higher than the expenses reported in the first quarter of 2017. By contrast, depreciation, amortization and impairment losses decreased by EUR 0.1 billion compared to the first quarter of 2017, mainly from slightly lower levels of amortization of intangible assets and depreciation of property, plant and equipment.

The following provides further details regarding the factors (other than net revenue) that contributed to profit from operations in the first quarter of 2018. For further information, see "*Selected Notes to the Consolidated Income Statement*" in the notes to our condensed consolidated interim financial statements as of and for the period ended March 31, 2018, incorporated by reference in this offering memorandum.

- *Other operating income*. Other operating income decreased substantially by EUR 397 million, or 51.6 percent, compared to the first quarter of 2017 to EUR 373 million. Income from the disposal of non-current assets were attributable to the disposal of real estate previously recognized as non-current assets and disposal groups held for sale. Income from insurance compensation mainly comprised compensation payments received by T-Mobile US in the first quarter of 2018 for damage caused by hurricanes in 2017. Miscellaneous other operating income decreased by EUR 0.5 billion compared to the first quarter of 2017, mainly attributable to income of EUR 0.5 billion in the first quarter of 2017 from the deconsolidation of Strato.

- *Changes in inventories*. Changes in inventories decreased by EUR 39 million, or 97.5 percent, compared to the first quarter of 2017 to EUR 1 million, primarily attributable to the completion in 2018 of work-in-progress projects in our Systems Solutions operating segment.

- *Own capitalized costs*. Own capitalized costs increased by EUR 17 million, or 3.1 percent, compared to the first quarter of 2017.

- *Goods and services purchased*. Expenses relating to goods and services purchased decreased by EUR 594 million, or 6.4 percent, compared to the first quarter of 2017, primarily due to lower repair and reprocessing costs, favorable exchange rate effects on the cost of merchandise and purchased services, as well as positive effects from the first-time application of IFRS 15.

- *Personnel costs*. Expenses relating to personnel costs increased by EUR 93 million, or 2.3 percent, compared to the first quarter of 2017, primarily attributable to higher remuneration costs, which were partially offset by favorable exchange rate effects (particularly from the translation of U.S. dollars into euros).

- *Other operating expenses*. Other operating expenses increased by EUR 52 million, or 6.8 percent, compared to the first quarter of 2017, relating to a large number of individual items each accounting for a marginal amount.

- *Depreciation, amortization and impairment losses*. Depreciation, amortization and impairment losses decreased by EUR 94 million, or 2.9 percent, compared to the first quarter of 2017. This decline resulted mainly from slightly lower overall levels of amortization of intangible assets and depreciation of property, plant and equipment.

In the 2017 financial year, profit from operations increased to EUR 9.4 billion, a slight increase of EUR 0.2 billion, or 2.4 percent, compared to 2016. The overall development was driven by a number of offsetting factors. Positive special 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, EUR 0.5 billion income from divestitures in connection with the sale of Strato AG in March 2017, EUR 0.2 billion income from the sale of the remaining shares in Scout24 AG, and EUR 0.2 billion income from a settlement agreement concluded with BT in July 2017. 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. In contrast, depreciation, amortization and impairment losses increased by EUR 1.2 billion, including 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. In addition, impairment losses on property, plant, and equipment totaling EUR 0.1 billion were recognized. Depreciation of property, plant and equipment and amortization of intangible assets were slightly lower than in the prior year.

The following provides further details regarding the factors (other than net revenue) that contributed to profit from operations in the 2017 financial year. For further information, see Notes 16 to 22 to our consolidated financial statements as of and for the year ended December 31, 2017, incorporated by reference in this offering memorandum.

- *Other operating income*. Other operating income decreased by EUR 361 million, or 8.6 percent, compared to 2016 to EUR 3.8 billion. Income from the reversal of impairment losses on non-current assets mainly comprised the partial reversal in the third quarter of 2017 of impairment losses on spectrum licenses at T-Mobile US, increasing their carrying amount by EUR 1.7 billion before deferred taxes. Income from the disposal of non-current assets decreased by EUR 0.3 billion compared with 2016, attributable to income of EUR 0.5 billion recognized in 2016 from transactions for the exchange of spectrum licenses between T-Mobile US and two telecommunications companies. Total income of EUR 0.2 billion was recorded in 2017 from transactions for the exchange of spectrum licenses completed between T-Mobile US and telecommunications companies. Miscellaneous other operating income in 2017 decreased by EUR 1.6 billion compared to 2016, mainly comprising income of EUR 0.5 billion from the divestiture of Strato AG, income of EUR 0.2 billion from a payment received in connection with the settlement agreement concluded with BT in July 2017, and income of EUR 0.2 billion from the sale of the remaining shares in Scout24 AG, which had been accounted for using the equity method. In 2016, income from the sale of stakes accounted for using the equity method included EUR 2.5 billion from the sale of the stake in the EE joint venture. Around EUR 0.9 billion of this amount was accounted for by effects recognized directly in equity in previous years.

- *Changes in inventories*. Changes in inventories increased by EUR 33 million, from negative EUR 12 million in 2016 to positive EUR 21 million in 2017, primarily attributable to higher inventories as a result of new projects under construction in our Systems Solutions operating segment.

- *Own capitalized costs*. Own capitalized costs amounted to EUR 2.3 billion in 2017, an increase of EUR 180 million, or 8.5 percent, compared to 2016, and mainly related to investments in network build-out and the development of platforms for cell sites.

- *Goods and services purchased*. Expenses relating to goods and services purchased increased by EUR 1.1 billion, or 2.9 percent, compared to 2016, primarily arising from higher costs for merchandise and purchased services due to higher average prices and a larger customer base, partially offset by lower costs for raw materials and supplies.

- *Personnel costs*. Expenses relating to personnel costs decreased by EUR 959 million, or 5.8 percent, compared to 2016, due to the high restructuring expenses in connection with the early retirement arrangements for civil servants in 2016 and the lower average headcount in Germany in 2017, partially offset by the higher average salaries of employees.

- *Other operating expenses*. Other operating expenses increased by EUR 160 million, or 4.9 percent, compared to 2016. Miscellaneous other operating expenses comprised a large number of low-value individual items, including other administrative expenses and fees totaling EUR 217 million compared to EUR 189 million in 2016.

- *Depreciation, amortization and impairment losses*. Depreciation, amortization and impairment losses increased by EUR 1.2 billion, or 9.0 percent, compared to 2016. The increase mainly resulted from impairment losses of EUR 1.2 billion recognized on goodwill in the Systems Solutions operating segment and EUR 0.8 billion in total on the goodwill of the national companies in Poland, Romania, and Albania in the Europe operating segment. Furthermore, impairment losses of EUR 0.1 billion were recognized on property, plant and equipment following scheduled and ad hoc impairment testing at the cash-generating units. Impairment losses on property, plant and equipment related mainly to the asset category of land and equivalent rights, and buildings including buildings on land owned by third parties and technical equipment and machinery. Depreciation and amortization generally were slightly lower than in 2016, while depreciation and amortization relating primarily to the build-out of the 4G/LTE network in the United States operating segment increased. This was partially offset by lower depreciation in connection with terminal equipment leased as part of the "JUMP! On Demand" program.

In the 2016 financial year, profit from operations increased to EUR 9.2 billion, a significant increase of EUR 2.1 billion, or 30.4 percent, compared to 2015, driven by positive special factors, relating primarily to income of EUR 2.5 billion from the sale of our stake in the EE joint venture on January 29, 2016. Income of EUR 0.5 billion in total was generated from transactions for the exchange of spectrum licenses between T-Mobile US and two competitors in March and September 2016. The sale of further parts of the share package in Scout24 AG in April and December 2016 generated income of around EUR 0.1 billion. Offsetting these positive special factors was an increase in depreciation, amortization and impairment losses of EUR 2.0 billion compared to 2015. Amortization of intangible assets and depreciation of property, plant and equipment were EUR 1.5 billion higher than in 2015, mainly recognized in connection with the build-out of the 4G/LTE network and the "JUMP! On Demand" program launched in our United States operating segment in June 2015. In 2016 the Europe operating segment recognized impairments of goodwill in the amount of EUR 0.5 billion, majority of which related to the Netherlands cash-generating unit. In addition, impairment losses on property, plant, and equipment totaling EUR 0.2 billion were recognized, which also mainly related to the Europe operating segment.

The following provides further details regarding the factors (other than net revenue) that contributed to profit from operations in the 2016 financial year. For further information, see Notes 16 to 22 to our consolidated financial statements as of and for the year ended December 31, 2016, incorporated by reference in this offering memorandum.

- *Other operating income*. Other operating income increased by EUR 2.2 billion compared to 2015 to EUR 4.2 billion. Income from the disposal of non-current assets increased by EUR 0.4 billion. The increase in other operating income was attributable, in particular, to income of EUR 0.5 billion from transactions for the exchange of spectrum licenses between T-Mobile US and two competitors. Miscellaneous other operating income increased by EUR 1.8 billion compared to 2015 to a total of EUR 3.2 billion. One of the main items driving this increase was income from divestitures and from the sale of stakes accounted for using the equity method of EUR 2.5 billion resulting from the sale of the stake in the EE joint venture. Around EUR 0.9 billion of this amount resulted from effects recognized directly in equity in previous years. Income of EUR 0.1 billion from the sale of further parts of the share package in Scout24 AG in April and December 2016 also increased this item. In 2015, the sale of shares completed in connection with the IPO of Scout24 AG in early October 2015 had resulted in income of EUR 0.3 billion. In addition, the sale of the online platform t-online.de and of the digital content marketing company InteractiveMedia in November 2015 generated income from divestitures of EUR 0.3 billion. Also in 2015, miscellaneous other operating income had included income of EUR 175 million from an agreement to settle a complaints procedure under anti-trust law. A large number of smaller items are also included in miscellaneous other operating income.

- *Changes in inventories*. Changes in inventories decreased by EUR 1 million, from negative EUR 11 million in 2015 to negative EUR 12 million in 2016.

- *Own capitalized costs*. Own capitalized costs amounted to EUR 2.1 billion in 2016, an increase of EUR 71 million, or 3.5 percent, compared to 2015, and mainly related to investments in network build-out and the development of platforms for cell sites.

- *Goods and services purchased*. Expenses relating to goods and services purchased increased by EUR 1.4 billion, or 3.9 percent, compared to 2015, primarily attributable to higher costs for merchandise due to a higher use of goods for terminals, and higher costs for purchased services due to higher expenses related to marketing activities.

- *Personnel costs*. Expenses relating to personnel costs increased by EUR 607 million, or 3.8 percent, compared to 2015. More than half of the increase was attributable to increased restructuring expenses, especially in connection with greater take-up of early retirement arrangements for civil servants. The increase in the average salaries of employees also elevated personnel costs, offset by the lower average headcount.

- *Other operating expenses*. Other operating expenses decreased by EUR 32 million, or 1.0 percent, compared to 2015. Miscellaneous other operating expenses primarily included regulatory levies of EUR 470 million for funding the telecommunications infrastructure in the United States compared to EUR 377 million in 2015. The item also included cash and guarantee transaction costs of EUR 305 million (2015: EUR 261 million), insurance expenses of EUR 92 million (2015: EUR 88 million), and other administrative expenses and fees of EUR 189 million (2015: EUR 240 million).

- *Depreciation, amortization and impairment losses*. Depreciation, amortization and impairment losses increased by EUR 2.0 billion, or 17.8 percent, compared to 2015. This development was mainly attributable to the increase in depreciation and amortization recorded in the United States operating segment primarily as a result of the above-mentioned build-out of 4G/LTE and the launch of the "JUMP! On Demand" terminal equipment lease model in June 2015 in the United States operating segment, under which customers no longer purchase the device but lease it. In 2016, impairment losses in the amount of EUR 0.5 billion were recognized on goodwill, and EUR 0.2 billion on property, plant and equipment following scheduled and ad hoc impairment testing at the cash-generating units. Impairment losses on property, plant and equipment related mainly to the asset class of technical equipment and machinery.

EBITDA

We define EBITDA as profit from operations plus depreciation, amortization and impairment losses. See below for a reconciliation of EBITDA and adjusted EBITDA to profit from operations.

In the first quarter of 2018, EBITDA decreased by EUR 0.7 billion compared to the first quarter of 2017 to EUR 5.3 billion, with special factors – which were negative on balance – decreasing by EUR 0.7 billion to negative EUR 0.3 billion. This decline was largely attributable to the non-recurrence of EUR 0.5 billion in income recorded in the first quarter of 2017 in connection with the deconsolidation of Strato, which was sold on March 31, 2017. In addition, expenses incurred in connection with staff-related measures and non-staff-related restructuring expenses amounted to EUR 0.3 billion, EUR 0.2 billion higher than the expenses reported in the first quarter of 2017.

In the 2017 financial year, our EBITDA increased by EUR 1.4 billion, or 6.3 percent, compared to 2016 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 AG completed as of 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 2016. Special factors in 2016 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.

In the 2016 financial year, our EBITDA increased substantially by EUR 4.2 billion compared to 2015 to EUR 22.5 billion. This included positive net special factors of EUR 1.1 billion, relating primarily to income of EUR 2.5 billion from the sale of our stake in the EE joint venture on January 29, 2016. Income of EUR 0.5 billion in total was generated from transactions for the exchange of spectrum licenses between T-Mobile US and two competitors in March and September 2016. The sale of further parts of the share package in Scout24 AG in April and December 2016 generated income of around EUR 0.1 billion. The sale of shares in connection with the IPO of Scout24 AG had already resulted in income of EUR 0.3 billion in 2015. Expenses incurred in connection with staff-related measures and non-staff-related restructuring expenses totaled EUR 1.7 billion, a slight increase compared to 2015. Furthermore, expenses of around EUR 0.1 billion from the decommissioning of the MetroPCS CDMA network had an impact. In 2015, these expenses had amounted to EUR 0.4 billion. The special factors affecting EBITDA in 2015 included income from the divestiture of our online platform t-online.de and our digital marketing company InteractiveMedia for a total amount of EUR 0.3 billion.

Reconciliation of EBITDA and Adjusted EBITDA

The following table presents a reconciliation of the performance measures EBITDA and adjusted EBITDA to profit from operations as reported by the Group for the periods indicated:

	Q1 2018	2017	2016	2015
	(millions of €)			
	(unaudited, except as otherwise indicated)			
Profit from operations	**2,171**	**9,383[1]**	**9,164[1]**	**7,028[1]**
Depreciation, amortization and impairment losses	(3,097)	(14,586)[1]	(13,380)[1]	(11,360)[1]
EBITDA	**5,269**	**23,969**	**22,544**	**18,388**
Special factors – Germany[2, 3]	**(167)**	**(306)**	**(910)**	**(545)**
Staff-related measures	(160)	(219)	(854)	(402)
Non-staff-related restructuring	(6)	(26)	(38)	(112)
Effects of deconsolidations, disposals and acquisitions	–	0	0	0
Other	(1)	(61)	(18)	(31)
Special factors – United States	**28**	**1,633**	**406**	**(425)**
Staff-related measures	(2)	(7)	(11)	(59)
Non-staff-related restructuring	–	0	0	0
Effects of deconsolidations, disposals and acquisitions	30	(11)	417	(382)
Reversal of impairment losses on non-current assets		1,651	–	–
Other	–	0	0	7
Special factors – Europe[3]	**(7)**	**(130)**	**(93)**	**(207)**
Staff-related measures	(5)	(92)	(100)	(166)
Non-staff-related restructuring	–	(3)	(4)	(12)
Effects of deconsolidations, disposals and acquisitions	0	18	25	33
Other	(1)	(53)	(14)	(62)
Special factors – Systems Solutions[3]	**(38)**	**(229)**	**(252)**	**(481)**
Staff-related measures	(24)	(132)	(136)	(233)
Non-staff-related restructuring	0	(2)	(5)	(229)
Effects of deconsolidations, disposals and acquisitions	–	0	0	(4)
Other	(14)	(94)	(111)	(15)
Special factors – Group Development[3]	**(5)**	**893**	**2,547**	**556**
Staff-related measures	(2)	1	(35)	(6)
Non-staff-related restructuring	–	(5)	(3)	(2)
Effects of deconsolidations, disposals and acquisitions	(3)	708	2,585	580
Other	(1)	189	0	(16)
Special factors – Group Headquarters & Group Services[2, 3]	**(92)**	**(121)**	**(574)**	**(416)**
Staff-related measures	(76)	(109)	(502)	(353)
Non-staff-related restructuring	(15)	(49)	(31)	(78)
Effects of deconsolidations, disposals and acquisitions	–	63	(11)	(8)
Other	(1)	(26)	(29)	23
Special factors – Group reconciliation	**0**	**0**	**(1)**	**(2)**
Staff-related measures	0	0	0	(1)
Non-staff-related restructuring	0	0	0	0
Effects of deconsolidations, disposals and acquisitions	0	0	(1)	1
Other	0	0	0	(2)
Total special factors	**(281)**	**1,740**	**1,124**	**(1,520)**
Adjusted EBITDA	**5,549**	**22,230**	**21,420**	**19,908**

1 Audited.

2 We assigned Vivento Customer Services GmbH, a provider of call center services, to our Germany operating segment as of January 1, 2018; previously it was part of our Group Headquarters & Group Services segment. The figures for the 2017, 2016 and 2015 financial years have not been adjusted.

3 Since January 1, 2017, we have included in our segment reporting the Group Development operating segment and, within the Group Headquarters & Group Services segment, the Board of Management department Technology and Innovation. Comparative figures for the 2016 and 2015 financial years have been adjusted retrospectively. For further information, see "*Factors Affecting the Comparability of Results—Changes in Reportable Segments*".

Adjusted EBITDA

The following table presents the contribution of our reportable segments to adjust EBITDA as reported by the Group for the periods indicated:

	Q1 2018	Q1 2017	Change	
	(millions of €)			(%)
	(unaudited)			
Adjusted EBITDA	**5,549**	**5,550**	**(1)**	**0.0**
Germany[1]	2,082	2,055	27	1.3
United States	2,332	2,386	(54)	(2.3)
Europe	911	889	22	2.5
Systems Solutions	57	96	(39)	(40.6)
Group Development	231	238	(7)	(2.9)
Group Headquarters & Group Services[1]	(70)	(113)	43	38.1
Reconciliation	5	(1)	6	n.a.

n.a. – not applicable

1 We assigned Vivento Customer Services GmbH, a provider of call center services, to our Germany operating segment as of January 1, 2018; previously it was part of our Group Headquarters & Group Services segment. Comparative figures have been adjusted retrospectively.

	2017	Proportion of Adjusted EBITDA	2016	Proportion of Adjusted EBITDA	Change 2017/2016		2015
	(millions of €)	(%)	(millions of €)	(%)	(millions of €)	(%)	(millions of €)
				(unaudited)			
Adjusted EBITDA	**22,230**	**100.0**	**21,420**	**100.0**	**810**	**3.8**	**19,908**
Germany[1]	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[1]	3,749	16.9	3,866	18.0	(117)	(3.0)	3,944
Systems Solutions[1]	509	2.3	530	2.5	(21)	(4.0)	581
Group Development[1]	915	4.1	943	4.4	(28)	(3.0)	1,050
Group Headquarters & Group Services[1]	(716)	(3.2)	(670)	(3.1)	(46)	(6.9)	(554)
Reconciliation	(11)	(0.1)	(47)	(0.3)	36	76.6	(40)

1 Since January 1, 2017, we have included in our segment reporting the Group Development operating segment and, within the Group Headquarters & Group Services segment, the Board of Management department Technology and Innovation. Comparative figures have been adjusted retrospectively.

In the first quarter of 2018, adjusted EBITDA was stable compared to the first quarter of 2017, at EUR 5.5 billion. Negative exchange rate effects of EUR 0.3 billion, particularly from the translation of U.S. dollars into euros, negatively affected this result. Excluding such effects, adjusted EBITDA increased by EUR 0.3 billion, or 6.6 percent. Adjusted for exchange rate effects, adjusted EBITDA at our United States operating segment was markedly positive, especially due to the revenue growth and the positive net impact from hurricanes of USD 58 million, which included USD 94 million in reimbursements received from insurance carriers in the first quarter of 2018. Our Germany and Europe operating segments also performed well. Adjusted EBITDA declined at our Systems Solutions operating segment, primarily due to increased costs incurred to expand the strategic growth areas in digitalization business as well as to the erosion of margins in traditional IT business. In our Group Development operating segment, adjusted EBITDA declined, mainly due to forgone earnings following the deconsolidation of Strato AG in the first quarter of 2017.

Adjusted EBITDA in the 2017 financial year increased by EUR 0.8 billion, or 3.8 percent, compared to 2016 to EUR 22.2 billion. 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. Adjusted EBITDA 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-recurrence of revenue from the completion in 2016 of the set-up phase for the toll collection system in Belgium, as well as 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 AG. 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 increased by EUR 1.0 billion, or 4.9 percent.

Adjusted EBITDA in the 2016 financial year increased compared to 2015 by EUR 1.5 billion to EUR 21.4 billion. This development was primarily driven by our United States operating segment, which recorded an increase in its adjusted EBITDA contribution of EUR 1.9 billion, mainly as a result of the continued success of the "Un-carrier" initiatives. The revenue effects from the "JUMP! On Demand" terminal equipment lease model also contributed to the increase in adjusted EBITDA as the related costs were depreciated over the lease term and thus were excluded from adjusted EBITDA. In 2016, EBITDA adjusted for special factors was stable compared to 2015 in our Germany operating segment. Efficiency gains across all functions compensated for lower revenue. Adjusted EBITDA declined in our Europe operating segment – primarily as a result of competition and regulation – and in our Systems Solutions operating segment, mainly due to the accounting treatment of risks from individual corporate customer contracts. Our Group Headquarters & Group Services segment's adjusted EBITDA had benefited in the 2015 from a positive non-recurring effect resulting from an agreement to settle a complaints procedure under anti-trust law. Exchange rate effects and effects from changes in the composition of the Group had only minimal impact on the development of adjusted EBITDA.

Profit before Income Taxes

In the first quarter of 2018, profit before income taxes increased by EUR 1.0 billion to EUR 1.8 billion compared with the first quarter of 2017. This substantial increase was attributable to the decrease of EUR 1.6 billion in the loss of from financial activities to EUR 0.4 billion. This decrease was due, in particular, to the EUR 0.7 billion impairment of our financial stake in BT that was recognized in profit and loss in the first quarter of 2017. In March 2018, we transferred our financial stake in BT to Deutsche Telekom Trust e.V., where it will be used as plan assets to cover our pension obligations. With effect from the first quarter of 2018, changes in the value of our stake will be recognized directly in equity (other comprehensive income) and no longer as profit/loss from financial activities in the income statement. Nor will future dividend income from the stake in BT be recognized in profit/loss from financial activities. Finance costs decreased by EUR 0.2 billion. In the first quarter of 2018, negative remeasurement effects from the exercise and measurement of embedded derivatives at T-Mobile US – mainly relating to the early repayment of external financial liabilities – increased the loss from financial activities by EUR 0.1 billion. In the first quarter of 2017, this negative effect on loss from financial activities totaled EUR 0.6 billion.

In the 2017 financial year, profit before income taxes increased from EUR 4.5 billion in 2016 to EUR 5.0 billion. This was due to the positive trend in profit from operations, 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 2016, 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 comprised 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 2017. The 2016 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.

Despite a substantial increase in profit from operations, profit before income taxes in the 2016 financial year decreased by EUR 0.2 billion compared to 2015 to EUR 4.5 billion, due to the increase of EUR 2.4 billion in our loss from financial activities. The EUR 2.2 billion impairment of our financial stake in BT, which was recognized in profit and loss, was one of the main factors in this increase. This impairment comprised both the share price effect and the exchange rate effect. In 2016, we received a final dividend of EUR 0.2 billion in connection with the sale of our stake in the former EE joint venture, and further dividend payments amounting to EUR 0.2 billion from our financial stake in BT. In 2015 we received dividend payments of EUR 0.4 billion from the EE joint venture. In the 2016 financial year, an impairment loss of EUR 50 million was recognized on our associate Ströer SE & Co. KGaA, which is accounted for using the equity method. Contrary effects arose from the subsequent measurement of embedded derivatives at T-Mobile US, which resulted in negative EUR 0.1 billion. However, this was slightly better than the 2015 figure. Finance costs amounted to EUR 2.5 billion, putting the figure at EUR 0.1 billion below the prior-year level.

Net Profit

In the first quarter of 2018, net profit increased compared to the first quarter of 2017 by EUR 0.2 billion to EUR 1.0 billion. Tax expense amounted to EUR 0.5 billion in the first quarter of 2018, a EUR 0.6 billion increase compared to the first quarter of 2017. Profit attributable to non-controlling interests increased by EUR 0.2 billion compared to the first quarter of 2017, mainly in our United States operating segment.

In the 2017 financial year, net profit increased compared to 2016 by EUR 0.8 billion to EUR 3.5 billion. After recording a tax expense of EUR 1.4 billion in 2016, 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 by EUR 1.7 billion compared with 2016 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.

In the 2016 financial year, net profit decreased by EUR 0.6 billion to EUR 2.7 billion. The tax expense in 2016 amounted to EUR 1.4 billion, a EUR 0.2 billion increase compared to 2015. Profit attributable to non-controlling interests increased compared with 2015 by EUR 0.2 billion. In our United States operating segment, the increase in profit attributable to non-controlling interests was primarily driven by the positive business performance.

Financial Position of the Group

The following tables present information concerning our consolidated statement of financial position as of the dates indicated.

	March 31, 2018[1]		December 31, 2017		Change
	millions of €	% of balance sheet total	millions of €	% of balance sheet total	millions of €
	(unaudited)		(audited, except as otherwise indicated)	(unaudited)	
Assets					
Current assets	**21,706**	**15.7**	**20,392**	**14.4**	**1,314**
Cash and cash equivalents	3,618	2.6	3,312	2.3	306
Trade and other receivables	9,121	6.6	9,723	6.9	(602)
Other current assets[2, 8]	8,833	6.4	7,196	5.1	1,637
Non-current assets and disposal groups held for sale	134	0.1	161	0.1	(27)
Non-current assets	**116,319**	**84.3**	**120,943**	**85.6**	**(4,624)**
Intangible assets	61,957	44.9	62,865	44.5	(908)
Property, plant and equipment	46,576	33.7	46,878	33.2	(302)
Investments accounted for using the equity method	571	0.4	651	0.5	(80)
Other non-current assets[3, 8]	7,215	5.2	10,548	7.5	(3,333)
Total assets	**138,025**	**100.0**	**141,334**	**100.0**	**(3,309)**
Liabilities and shareholders' equity					
Current liabilities	**26,223**	**19.0**	**27,366**	**19.4**	**(1,143)**
Financial liabilities	8,905	6.5	8,358	5.9	547
Trade and other payables	9,132	6.6	10,971	7.8	(1,839)
Current provisions[4, 8]	3,082	2.2	3,372	2.4	(290)
Other current liabilities[5, 8]	5,104	3.7	4,664	3.3	440
Liabilities directly associated with non-current assets and disposal groups held for sale	–	n.a.	–	n.a.	–
Non-current liabilities	**68,111**	**49.3**	**71,498**	**50.6**	**(3,387)**
Financial liabilities	48,799	35.4	49,171	34.8	(372)
Non-current provisions[6, 8]	8,379	6.1	11,530	8.2	(3,151)
Other non-current liabilities[7, 8]	10,933	7.9	10,798	7.6	135
Shareholders' equity	**43,691**	**31.7**	**42,470**	**30.0**	**1,221**
Total liabilities and shareholders' equity	**138,025**	**100.0**	**141,334**	**100.0**	**(3,309)**

n.a. – not applicable

1 The new accounting standards IFRS 15 "Revenue from Contracts with Customers" and IFRS 9 "Financial Instruments" took effect as of January 1, 2018. Prior-year figures were not adjusted. For more information, see "*Accounting Policies*" in the notes to our condensed consolidated interim financial statements as of and for the three-month period ended March 31, 2018, incorporated by reference in this offering memorandum.

2 Other current assets includes "Contract assets", "Current recoverable income taxes", "Other financial assets", "Inventories" and "Other assets" as presented in the condensed consolidated interim financial statements as of and for the three-month period ended March 31, 2018.

3 Other non-current assets includes "Capitalized contract costs", "Other financial assets", "Deferred tax assets" and "Other assets" as presented in the condensed consolidated interim financial statements as of and for the three-month period ended March 31, 2018.

4 Current provisions includes "Other provisions" as presented in the condensed consolidated interim financial statements as of and for the three-month period ended March 31, 2018.

5 Other current liabilities includes "Income tax liabilities", "Other liabilities" and "Contract liabilities" as presented in the condensed consolidated interim financial statements as of and for the three-month period ended March 31, 2018.

6 Non-current provisions includes "Provisions for pensions and other employee benefits" and "Other non-current provisions" as presented in the condensed consolidated interim financial statements as of and for the three-month period ended March 31, 2018.

7 Other non-current liabilities includes "Deferred tax liabilities", "Other liabilities" and "Contract liabilities" as presented in the condensed consolidated interim financial statements as of and for the three-month period ended March 31, 2018.

8 Unaudited.

	December 31, 2017		December 31, 2016		Change Dec. 31, 2017/ Dec. 31, 2016	December 31, 2015	
	millions of €	% of balance sheet total	millions of €	% of balance sheet total	millions of €	millions of €	% of balance sheet total
	(audited, except as otherwise indicated)	(unaudited)	(audited, except as otherwise indicated)	(unaudited)	(unaudited)	(audited, except as otherwise indicated)	(unaudited)
Assets							
Current assets	**20,392**	**14.4**	**26,638**	**17.9**	**(6,246)**	**32,184**	**22.4**
Cash and cash equivalents	3,312	2.3	7,747	5.2	(4,435)	6,897	4.8
Trade and other receivables	9,723	6.9	9,362	6.3	361	9,238	6.4
Other current assets[1, 7]	7,196	5.1	9,157	6.2	(1,961)	9,127	6.3
Non-current assets and disposal groups held for sale	161	0.1	372	0.3	(211)	6,922	4.8
Non-current assets	**120,943**	**85.6**	**121,847**	**82.1**	**(904)**	**111,736**	**77.6**
Intangible assets	62,865	44.5	60,599	40.8	2,266	57,025	39.6
Property, plant and equipment	46,878	33.2	46,758	31.5	120	44,637	31.0
Investments accounted for using the equity method	651	0.5	725	0.5	(74)	822	0.6
Other non-current assets[2, 7]	10,548	7.5	13,765	9.3	(3,217)	9,252	6.4
Total assets	**141,334**	**100.0**	**148,485**	**100.0**	**(7,151)**	**143,920**	**100.0**
Liabilities and shareholders' equity							
Current liabilities	**27,366**	**19.4**	**33,126**	**22.3**	**(5,760)**	**33,548**	**23.3**
Financial liabilities	8,358	5.9	14,422	9.7	(6,064)	14,439	10.0
Trade and other payables	10,971	7.8	10,441	7.0	530	11,090	7.7
Current provisions[3, 7]	3,372	2.4	3,068	2.1	304	3,367	2.3
Other current liabilities[4, 7]	4,664	3.3	5,001	3.4	(337)	4,648	3.2
Liabilities directly associated with non-current assets and disposal groups held for sale	–	n.a.	194	0.1	(194)	4	0.0
Non-current liabilities	**71,498**	**50.6**	**76,514**	**51.5**	**(5,016)**	**72,222**	**50.2**
Financial liabilities	49,171	34.8	50,228	33.8	(1,057)	47,941	33.3
Non-current provisions[5, 7]	11,530	8.2	11,771	7.9	(241)	11,006	7.6
Other non-current liabilities[6, 7]	10,798	7.6	14,515	9.8	(3,717)	13,275	9.2
Shareholders' equity	**42,470**	**30.0**	**38,845**	**26.2**	**3,625**	**38,150**	**26.5**
Total liabilities and shareholders' equity	**141,334**	**100.0**	**148,485**	**100.0**	**(7,151)**	**143,920**	**100.0**

n.a. – not applicable

1 Other current assets includes "Current recoverable income taxes", "Other financial assets", "Inventories", and "Other assets" as presented in the Consolidated Financial Statements.

2 Other non-current assets includes "Other financial assets", "Deferred tax assets" and "Other assets" as presented in the Consolidated Financial Statements.

3 Current provisions includes "Other provisions" as presented in the Consolidated Financial Statements.

4 Other current liabilities includes "Income tax liabilities" and "Other liabilities" as presented in the Consolidated Financial Statements.

5 Non-current provisions includes "Provisions for pensions and other employee benefits" and "Other non-current provisions" as presented in the Consolidated Financial Statements.

6 Other non-current liabilities includes "Deferred tax liabilities" and "Other liabilities" as presented in the Consolidated Financial Statements.

7 Unaudited.

Comparison as of March 31, 2018 to December 31, 2017

Total assets. As of March 31, 2018, total assets amounted to EUR 138.0 billion, a decrease of EUR 3.3 billion compared to December 31, 2017.

Current assets and non-current assets. While current assets increased by EUR 1.3 billion, non-current assets decreased by EUR 4.6 billion.

Cash and cash equivalents. Cash and cash equivalents increased by EUR 0.3 billion.

Trade and other receivables. Trade and other receivables decreased by EUR 0.6 billion to EUR 9.1 billion, primarily due to a reduction in the volume of receivables, especially in the United States operating segment. Exchange rate effects, primarily from the translation from U.S. dollars into euros, also reduced the carrying amounts.

Non-current assets and disposal groups held for sale. The carrying amount of the non-current assets and disposal groups held for sale decreased by EUR 27 million to EUR 0.1 billion.

Intangible assets and property, plant and equipment. The total carrying amounts of intangible assets and property, plant and equipment were EUR 1.2 billion lower compared to December 31, 2017. Capital expenditure on our networks, especially in upgrading the network in our United States operating segment and building out broadband/optical fiber in our Germany operating segment, increased the carrying amounts by EUR 3.2 billion. Changes in the composition of the Group in the amount of EUR 0.4 billion – mainly from the acquisition of online TV provider Layer3 TV in the United States operating segment – also increased the carrying amounts. Depreciation, amortization and impairment losses of EUR 3.1 billion and negative exchange rate effects of EUR 1.4 billion, especially from the translation of U.S. dollars into euros, lowered the carrying amounts.

Other current and non-current assets. As of March 31, 2018, current and non-current other financial assets, included under other current assets and other non-current assets in the relevant table under "Financial Position of the Group" above, decreased by EUR 4.3 billion compared with December 31, 2017 to EUR 4.7 billion. On March 23, 2018, we transferred our 12 percent financial stake in BT, which is worth EUR 3.1 billion, to the Group's own trust, Deutsche Telekom Trust e.V., where it will serve as plan assets to cover pension entitlements. The impairment loss on the exchange-traded stake in BT – which was recognized in other comprehensive income for the period from January 1, 2018 until the date of transfer – reduced the carrying amount by EUR 0.7 billion. Exchange rate effects, primarily from the translation from U.S. dollars into euros, also reduced the carrying amounts. Capitalized contract assets in the amount of EUR 1.7 billion, included under other current assets in the relevant table under "Financial Position of the Group" above, and capitalized contract costs of EUR 1.3 billion, included under other non-current assets in the relevant table under "Financial Position of the Group" above, increased other assets. These related to the remeasurement and reclassification effects recognized directly in equity following the mandatory application of IFRS 15 as of January 1, 2018.

Current liabilities and non-current liabilities. As of March 31, 2018, current liabilities decreased by EUR 1.1 billion and non-current liabilities increased by EUR 3.4 billion.

Current and non-current financial liabilities. Our current and non-current financial liabilities increased slightly, by EUR 0.2 billion compared with the end of 2017 to a total of EUR 57.7 billion as of March 31, 2018. This was primarily due to the issue of new bonds at T-Mobile US in the amount of EUR 2.0 billion (translated into euros) and to an increase of EUR 1.0 billion in liabilities to banks. The early repayment of T-Mobile US's debt instruments in the amount of EUR 0.8 billion (translated into euros) and regular repayments of bond liabilities of EUR 1.1 billion had an offsetting effect. The net change of EUR 0.8 billion in commercial paper also decreased the carrying amount of the financial liabilities.

Trade and other payables. Trade and other payables decreased by EUR 1.8 billion to EUR 9.1 billion. This decline was attributable to the reduction in liabilities, especially at the United States, Europe and Germany operating segments, and to the effects of the translation of U.S. dollars into euros.

Current and non-current provisions. Provisions (current and non-current) for pensions and other employee benefits decreased by EUR 3.1 billion compared with December 31, 2017, mainly due to the transfer of our stake in BT and the associated netting of these plan assets with the defined benefit obligations.

Other liabilities. As of March 31, 2018, other current liabilities and other non-current liabilities increased by EUR 0.5 billion compared to December 31, 2017. While current and non-current contract liabilities increased by EUR 2.4 billion as a result of remeasurement and reclassification effects recognized directly in equity following the mandatory application of IFRS 15 as of January 1, 2018, current and non-current other liabilities decreased by a comparable amount on first-time application of IFRS 15.

Shareholders' equity. Shareholders' equity increased by EUR 1.2 billion from EUR 42.5 billion as of December 31, 2017 to EUR 43.7 billion as of March 31, 2018. Profit after taxes of EUR 1.3 billion had an increasing effect. The transition to IFRS 9 and IFRS 15 had a cumulative effect recognized directly in equity as of January 1, 2018, namely an increase of EUR 1.9 billion in retained earnings that included shares attributable to non-controlling interests. By contrast, transactions with owners decreased shareholders' equity by EUR 0.7 billion. These transactions included EUR 0.5 billion for the share buy-back program launched by T-Mobile US in December 2017 and EUR 0.2 billion for the T-Mobile US shares acquired by Deutsche Telekom in the first quarter of 2018. Two other factors reduced shareholders' equity: the impairment loss of EUR 0.7 billion on the exchange-traded stake in BT – which was recognized in other comprehensive income for the period from January 1 through March 23, 2018 – and the currency translation effects in the amount of EUR 0.6 billion recognized directly in equity.

Comparison of December 31, 2017 to December 31, 2016

Total assets. Total assets as of December 31, 2017 amounted to EUR 141.3 billion, a decrease of EUR 7.1 billion compared with December 31, 2016, 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.

Cash and cash equivalents. 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. Trade and other receivables increased by EUR 0.4 billion to EUR 9.7 billion. Receivables increased slightly as of the end of 2017 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 2017 financial year on revolving monthly sales of trade receivables due.

Non-current assets and disposal groups held for sale. Non-current assets and disposal groups held for sale decreased by EUR 0.2 billion to EUR 0.2 billion. The sale of Strato AG 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 2017 financial year.

Other current assets. Other current financial assets, included under other current assets in the relevant table under “Financial Position of the Group” above, 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 December 31, 2017 in our United States and Germany operating segments. Exchange rate effects from the translation of U.S. dollars into euros decreased the carrying amount of other current assets.

Intangible assets. Intangible assets increased 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 in 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. 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.

Other non-current assets. 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, 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 liabilities and non-current liabilities. As of December 31, 2017, current liabilities decreased by EUR 5.7 billion and non-current liabilities decreased by EUR 5.0 billion.

Current and non-current financial liabilities. 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's debt instruments in the amount of EUR 9.5 billion (translated into 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 2017. 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. 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 had an offsetting effect.

Current and non-current provisions. 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 was 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. 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 the German Federal Post and Telecommunications Agency (*Bundesanstalt für Post- und Telekomunikation*) resulting from the early retirement model, and to exchange rate effects, in particular from the translation of U.S. dollars into euros.

Shareholders' equity. Shareholders' equity increased from EUR 38.8 billion as of December 31, 2016 to EUR 42.5 billion as of December 31, 2017, 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 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 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.

Comparison of December 31, 2016 to December 31, 2015

Total assets. Total assets as of December 31, 2016 increased by EUR 4.6 billion compared with December 31, 2015, largely due to higher levels of intangible assets and property, plant and equipment. Additions from spectrum licenses alone contributed EUR 4.1 billion. The asset side was reduced as a result of the EUR 2.2 billion impairment of our financial stake in BT, which was recognized in profit and loss. Total liabilities and shareholders' equity increased in particular on account of non-current financial liabilities.

Cash and cash equivalents. Cash and cash equivalents increased by EUR 0.9 billion year-on-year. For more information on this change, please refer to the consolidated statement of cash flows and selected notes to the consolidated statement of cash flows in our consolidated financial statements as of and for the year ended December 31, 2017 incorporated by reference in this offering memorandum.

Trade and other receivables. Trade and other receivables increased by EUR 0.1 billion to EUR 9.4 billion. The growth in the customer base resulting from T-Mobile US's successful "Un-carrier" initiatives resulted in an increase in receivables. Exchange rate effects, mainly from the translation of U. S. dollars into euros, also had a positive effect. By contrast, factoring agreements concluded in the 2016 financial year concerning monthly revolving sales of trade receivables due resulted in a reduction in receivables.

Non-current assets and disposal groups held for sale. The decrease of EUR 6.6 billion in the carrying amount of non-current assets and disposal groups held for sale to EUR 0.4 billion as of December 31, 2016 mainly resulted from the sale of our stake in the EE joint venture, which was completed on January 29, 2016 and reduced the carrying amount by EUR 5.8 billion. In this context, exchange rate effects totaling EUR 0.2 billion from the translation of pounds sterling to euros also lowered the net carrying amount compared with December 31, 2015. Secondly, the transaction agreed in the third quarter of 2015 for the exchange of spectrum licenses between T-Mobile US and a competitor with the aim of improving the mobile network coverage of T-Mobile US was completed in March 2016. This transaction reduced the net carrying amount by a further EUR 0.6 billion. A transaction agreed between T-Mobile US and a competitor in the third quarter of 2016 for the exchange of spectrum licenses, also aimed at improving the mobile network coverage of T-Mobile US, had an increasing effect of EUR 0.1 billion on the carrying amount. In December 2016, we agreed to sell our hosting service provider Strato AG to United Internet AG. This transaction increased the carrying amount by EUR 0.1 billion.

Other current assets. The carrying amount of other current financial assets, included under other current assets in the relevant table under "Financial Position of the Group" above, decreased slightly by EUR 0.1 billion to EUR 5.7 billion as of December 31, 2016. U. S. government bonds with a volume of EUR 2.8 billion that fell due and were repaid in the first half of 2016 reduced the carrying amount. By contrast, a refundable cash deposit of around EUR 2.1 billion recorded in the second quarter of 2016 in connection with a potential asset purchase in the United States increased this item. Inventories decreased by EUR 0.2 billion to EUR 1.6 billion, primarily due to lower stock levels of terminal equipment (in particular higher-priced smartphones) as of December 31, 2016.

Intangible assets. Intangible assets increased by EUR 3.6 billion to EUR 60.6 billion, mainly due to additions totaling EUR 7.5 billion. This included additions at T-Mobile US, largely in connection with transactions completed with competitors for the exchange of spectrum licenses totaling EUR 1.4 billion. Furthermore, there were additions from the acquisition of spectrum licenses by T-Mobile US in 2016 for around EUR 1.7 billion in total and by T-Mobile Polska for around EUR 1.0 billion. Positive exchange rate effects, primarily from the translation of U. S. dollars into euros, increased the carrying amount by EUR 1.1 billion. Amortization of EUR 4.1 billion, impairments of goodwill in the amount of EUR 0.5 billion, primarily in the Netherlands, as well as the reclassification of assets worth EUR 0.5 billion to non-current assets and disposal groups held for sale also lowered the carrying amount.

Property, plant and equipment. Property, plant and equipment increased by EUR 2.1 billion compared to December 31, 2015 to EUR 46.8 billion. Additions of EUR 11.4 billion primarily in the United States and Germany operating segments increased the carrying amount. This also included EUR 1.5 billion for capitalized higher-priced mobile devices relating to the business model "JUMP! On Demand" introduced at T-Mobile US in June 2015, under which customers no longer purchase the device but lease it. Exchange rate effects, primarily from the translation of U. S. dollars into euros, also increased the carrying amount by EUR 0.5 billion. Depreciation and amortization of EUR 8.6 billion and impairment losses of EUR 0.2 billion reduced the carrying amount, as did disposals of EUR 0.9 billion.

Other non-current assets. Other non-current financial assets, included under other non-current assets in the relevant table under "Financial Position of the Group" above, increased by EUR 4.4 billion to EUR 7.9 billion as of December 31, 2016. In return for our stake in the EE joint venture, we received a cash payment as well as a financial stake of 12.0 percent in BT. This addition increased the carrying amount by EUR 7.4 billion. As of December 31, 2016, an impairment of EUR 2.2 billion on this exchange-traded financial stake was recognized in profit and loss. The premature cancellation of interest rate derivatives with a fair value of EUR 0.6 billion also reduced the carrying amount. The settlement payment was recognized in net cash from operating activities in the amount of EUR 0.3 billion and in net cash used in financing activities in the amount of EUR 0.3 billion.

Current liabilities and non-current liabilities. As of December 31, 2016, current liabilities decreased by EUR 0.4 billion and non-current liabilities increased by EUR 4.3 billion.

Current and non-current financial liabilities. Our current and non-current financial liabilities increased by EUR 2.3 billion compared with the end of 2015 to EUR 64.7 billion in total. In March 2016, we placed euro bonds with institutional investors for a total volume of EUR 4.5 billion. These comprised a 4-year bond with a volume of EUR 1.25 billion, a 7-year bond with a volume of EUR 1.75 billion and a 12-year bond with a volume of EUR 1.5 billion. In April

2016, we placed a 5-year euro bond with a volume of EUR 0.5 billion, and in October 2016, we issued a 7-year GBP bond with a volume of GBP 300 million. In September 2016, we placed U. S. dollar bonds with a total volume of USD 2.75 billion (around EUR 2.5 billion) with institutional investors. These comprised a 3-year bond with a volume of USD 250 million, a 3-year bond with a volume of USD 750 million, a 5-year bond with a volume of USD 1.0 billion, and a 7-year bond with a volume of USD 750 million. On April 1, 2016, T-Mobile US issued senior notes with a total volume of USD 1.0 billion (around EUR 0.9 billion). In 2016, two U. S. dollar bonds were repaid in a total amount of USD 2.25 billion (around EUR 2.0 billion), as were euro bonds totaling EUR 0.9 billion, a bond in Swiss francs for CHF 0.4 billion (around EUR 0.4 billion), commercial paper in the amount of EUR 3.7 billion (net), and promissory notes in the amount of EUR 0.4 billion (net). The net decrease in liabilities to banks of EUR 0.1 billion also reduced the carrying amount of the financial liabilities.

In order to optimize the financing terms and conditions for our subsidiary T-Mobile US and thus also those for the Group, we provided T-Mobile US with a 3-year partially secured credit line of USD 2.5 billion and a secured loan of USD 660 million in December 2016. Together with the temporary loan commitments for up to USD 4.0 billion, which were made in March and April 2016 and ran until the end of May 2017, Deutsche Telekom provided its subsidiary T-Mobile US with a total funding framework of more than USD 7 billion as of December 31, 2016. This did not increase the Group's net debt.

Trade and other payables. Trade and other payables decreased by EUR 0.6 billion compared with the end of 2015 to EUR 10.4 billion, primarily attributable to the decrease in liabilities in our United States operating segment. Exchange rate effects from the translation from U. S. dollars into euros had an offsetting effect.

Current and non-current provisions. As of December 31, 2016, provisions (current and non-current) were EUR 14.8 billion, EUR 0.5 billion higher than the prior-year level, of which EUR 8.5 billion (December 31, 2015: EUR 8.0 billion) related to provisions for pensions and other employee benefits. The increase in provisions for pensions and other employee benefits was attributable in part to actuarial losses of EUR 0.7 billion (before taxes) recognized directly in equity and current service costs of EUR 0.2 billion. By contrast, benefits of EUR 0.3 billion paid in the 2016 financial year and the increase of our plan assets by EUR 0.3 billion (allocation under contractual trust agreement) reduced provisions. At EUR 6.4 billion, other provisions were slightly higher than in the prior year.

Other non-current liabilities. Other non-current liabilities increased by EUR 1.2 billion compared with the prior year to EUR 14.5 billion and included deferred tax assets, which increased by EUR 0.8 billion compared with the end of 2015 to EUR 10.0 billion, due in part to exchange rate effects from the translation of U.S. dollars into euros.

Shareholders' equity. Shareholders' equity increased by EUR 0.7 billion compared with December 31, 2015 to EUR 38.8 billion, due to profit after taxes of EUR 3.1 billion, currency translation effects recognized directly in equity of EUR 0.4 billion, and capital increases totaling EUR 0.3 billion carried out in connection with share-based payments. In addition, in connection with the option granted to our shareholders to have their dividend entitlements converted into shares, a capital increase of EUR 1.0 billion was carried out involving the contribution of the dividend entitlements. Dividend payments for the 2015 financial year to Deutsche Telekom shareholders of EUR 2.5 billion and to non-controlling interests of EUR 0.1 billion had an offsetting effect. In addition, as a result of the consummation of the sale of our stake in the former EE joint venture on January 29, 2016, the gains of EUR 0.9 billion from the translation of pounds sterling into euros that had until that date been disclosed in shareholders' equity were reclassified through profit or loss to the consolidated income statement. Actuarial losses (after taxes) of EUR 0.5 billion also had a negative effect.

Financial Liabilities

The following table sets forth the composition and maturity structure of our financial liabilities as of March 31, 2018.

	March 31, 2018			
	Total	Due within 1 year	Due > 1 year ≤ 5 years	Due > 5 years
	(millions of €)			
	(unaudited)			
Bonds and other securitized liabilities	44,261	3,020	16,333	24,908
Liabilities to banks	5,989	2,354	2,771	863
Finance lease liabilities	2,525	768	1,192	565
Liabilities to non-banks from promissory notes	536	204	53	279
Other interest-bearing liabilities	1,847	1,274	429	144
Other non-interest-bearing liabilities	1,326	1,228	94	1
Derivative financial liabilities	1,220	56	117	1,048
Financial liabilities	**57,704**	**8,905**	**20,989**	**27,807**

The following table sets forth the reconciliation of net debt to financial liabilities as of the dates indicated.

	March 31, 2018	December 31, 2017	December 31, 2016	December 31, 2015
	(millions of €)			
	(unaudited)	(audited)		
Financial liabilities (current)	8,905	8,358	14,422	14,439
Financial liabilities (non-current)	48,799	49,171	50,228	47,941
Financial liabilities	**57,704**	**57,529**	**64,650**	**62,380**
Accrued interest	(574)	(692)	(955)	(1,014)
Other	(793)	(781)	(1,029)	(857)
Gross debt	**56,337**	**56,056**	**62,666**	**60,509**
Cash and cash equivalents	3,618	3,312	7,747	6,897
Available-for-sale financial assets/ financial assets held for trading	–	7	10	2,877
Derivative financial assets	1,271	1,317	2,379	2,686
Other financial assets	993	629	2,571	479
Net debt	**50,455**	**50,791**	**49,959**	**47,570**

In the first three months of 2018, our net debt compared to the end of 2017 decreased by EUR 0.3 billion to EUR 50.5 billion. The increases in net debt arising from the share buy-back program at T-Mobile US of EUR 0.5 billion, the acquisition of T-Mobile US shares by Deutsche Telekom of EUR 0.2 billion, the acquisition of Layer3 TV of EUR 0.3 billion and finance leases of EUR 0.2 billion were more than offset by free cash flow (before dividend payments and spectrum investment) of EUR 1.3 billion and exchange rate effects of negative EUR 0.6 billion. Other effects of positive EUR 0.5 billion included, among other factors, financing options under which the payments for trade payables become due at a later point in time by involving banks in the process, and liabilities for the acquisition of broadcasting rights.

In the 2017 financial year, our net debt increased by EUR 0.8 billion to EUR 50.8 billion compared to December 31, 2016, mainly due to the acquisition of mobile spectrum for EUR 7.4 billion, dividend payments (including to non-controlling interests) of EUR 1.6 billion, finance leases of EUR 1.0 billion, embedded derivatives at T-Mobile US of EUR 0.6 billion and other effects of 1.3 billion, which included, 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. Offsetting these effects were decreases in net debt due to free cash flow of EUR 5.5 billion, the sale of Strato AG (negative EUR 0.6 billion), the sale of Scout24 AG (negative EUR 0.3 billion), the conversion of mandatory convertible preferred stock into ordinary shares of T-Mobile US (negative EUR 1.7 billion) and exchange rate effects of negative EUR 2.9 billion.

In the 2016 financial year, our net debt increased by EUR 2.4 billion to EUR 50.0 billion compared to December 31, 2015. The increase was driven by the acquisition of mobile spectrum for EUR 2.7 billion, dividend payments (including to non-controlling interests) of EUR 1.6 billion, exchange rate effects of EUR 0.8 billion, and pension commitments under a contractual trust agreement of EUR 0.3 billion. Other effects of EUR 2.2 billion contributed to the increase. These included, among other items, liabilities for the lease of network equipment classified as a finance lease primarily in our United States operating segment and liabilities for the acquisition of broadcasting rights. Other effects also included financing options, under which the payments for trade payables become due at a later point in time by involving banks in the process. Partially offsetting these effects were decreases in net debt due to free cash flow of EUR 4.9 billion and the sale of a share package in Scout24 AG (negative 0.1 billion).

Off-Balance Sheet Assets and Financial Instruments

In addition to the assets recognized in the statement of financial position, we carry assets off balance-sheet, primarily relating to leased property. For further information, please refer to Note 33 "*Leases*" and Note 34 "*Other financial obligations*" in the notes to each of the consolidated financial statements as of and for the years ended December 31, 2017 and December 31, 2016, in each case incorporated by reference in this offering memorandum.

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; December 31, 2015: EUR 3.5 billion). This mainly related to factoring agreements in the United States and Germany operating segments and, in 2016, to top-ups to existing factoring agreements. The agreements are mainly used for active receivables management.

Furthermore, in 2017, we chose financing options totaling EUR 0.3 billion (2016: EUR 0.2 billion; 2015: EUR 0.7 billion) which extended the period of payment for trade payables from operating and investing activities by intermediation of banks in the process. Upon payment, these trade payables are included under cash flows used in/from financing activities. As a result, these payables are recognized as financial liabilities in the statement of financial position.

In 2017, we primarily leased network equipment, which is recognized as a finance lease, for a total of EUR 1.0 billion (2016: EUR 0.9 billion). 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 Policy

The fundamentals of our 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 following table sets forth the ratings of the Company as of the dates indicated:

	Standard & Poor's	Moody's	Fitch
Long-term rating			
December 31, 2015	BBB+	Baa1	BBB+
December 31, 2016	BBB+	Baa1	BBB+
December 31, 2017	BBB+	Baa1	BBB+
March 31, 2018	**BBB+**	**Baa1**	**BBB+**
Short-term rating	**A-2**	**P-2**	**F2**
Outlook[1]	**CreditWatch negative**	**Negative**	**Stable**

[1] Following the announcement of the business combination of T-Mobile US and Sprint on April 29, 2018. Standard & Poor's has stated that the CreditWatch placement indicates that a one-notch downgrade (*i.e.*, to BBB) is likely if the business combination closes in the absence of operating performance significantly ahead of its base case and other material leverage-reduction measures.

A securities rating is not a recommendation to buy, sell or hold securities and is subject to revision or withdrawal at any time by the assigning rating organization. Each rating should be evaluated independently of any other rating. The same remarks hold true with regard to rating agency outlook statements.

Condensed Consolidated Statement of Cash Flows and Reconciliation of Free Cash Flow

The following table presents information concerning our condensed consolidated statement of cash flows and reconciliation of free cash flow for the periods indicated.

	Q1 2018	Q1 2017	2017	2016	2015
	(millions of €)				
	(unaudited)		(audited, except as otherwise indicated)		
Cash generated from operations	**4,805**	**5,280**	**19,706**	**18,116**	**17,496**
Interest received (paid)[1]	(509)	(926)	(2,510)	(2,583)	(2,499)
Net cash from operating activities	**4,297**	**4,355**	**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 – excluding goodwill and before spectrum investment)**[1]	(3,076)	(3,245)	(12,099)	(10,958)	(10,818)
Proceeds from disposal of intangible assets (excluding goodwill) and property, plant and equipment[1]	161	118	400	364	367
Free cash flow (before dividend payments and spectrum investment)[1]	**1,382**	**1,228**	**5,497**	**4,939**	**4,546**
Net cash used in investing activities	**(3,643)**	**(3,491)**	**(16,814)**	**(13,608)**	**(15,015)**
Net cash used in financing activities	**(294)**	**980**	**(4,594)**	**(1,322)**	**(876)**
Effect of exchange rate changes on cash and cash equivalents	(53)	(39)	(226)	250	267
Changes in cash and cash equivalents associated with non-current assets and disposal groups held for sale	–	(10)	3	(3)	1
Net increase (decrease) in cash and cash equivalents	306	1,795	(4,435)	850	(626)
Cash and cash equivalents	**3,618**	**9.542**	**3,312**	**7,747**	**6,897**

1 Unaudited.

For information on the statement of cash flows, see the notes to the consolidated statement of cash flows in the condensed consolidated interim financial statements as of and for the period ended March 31, 2018 and Note 30 "*Notes to the consolidated statement of cash flows*" to each of the consolidated financial statements as of and for the years ended December 31, 2017 and December 31, 2016, in each case incorporated by reference in this offering memorandum.

Cash Capex

In the first quarter of 2018, cash capex (including spectrum investments) decreased by EUR 0.2 billion to EUR 3.1 billion compared to the first three months of 2017, mainly due to mobile spectrum licenses acquired for total cash of EUR 0.1 billion, primarily in the United States operating segment. The prior-year figure included a total of EUR 35 million for the acquisition of mobile spectrum licenses, also predominantly for the United States operating segment. While cash capex for the broadband/fiber-optic build-out in the Germany operating segment was EUR 0.1 billion higher year-on-year, cash capex in the United States operating segment was EUR 0.3 billion lower. Adjusted for exchange rate effects, cash capex would have been in line with the prior-year period.

In the 2017 financial year, cash capex (including spectrum investments) increased by EUR 5.9 billion to EUR 19.5 billion compared to 2016, mainly due to spectrum licenses acquired for a total amount of EUR 7.3 billion in the United States operating segment. In the prior-year period, the United States and Germany operating segments in particular had acquired mobile spectrum licenses for EUR 2.7 billion in total. Excluding spectrum investment, cash capex increased by EUR 1.1 billion year-on-year, mainly in the United States, Germany, and Europe operating segments. Cash outflows related to network modernization and the continued network build-out, including build-out of the 4G/LTE network and the broadband/fiber-optic build-out.

In the 2016 financial year, cash capex (including spectrum investments) decreased by EUR 1.0 billion to EUR 13.6 billion compared to 2015, mainly due to mobile spectrum licenses acquired for a total of EUR 2.7 billion, primarily in the United States and Europe operating segments. In the prior-year period, the United States and Germany operating segments in particular had acquired mobile spectrum licenses for EUR 3.8 billion in total. Cash capex (excluding spectrum investment) increased slightly year-on-year, mainly from high investments in connection with the network modernization, including 4G/LTE network roll-out, in particular in the Germany, Europe and United States operating segments.

Free Cash Flow

In the first quarter of 2018, free cash flow in the Group before dividend payments and spectrum investment increased by EUR 0.2 billion year-on-year to EUR 1.4 billion. Net cash from operating activities decreased by EUR 0.1 billion to EUR 4.3 billion. Cash outflows for investments in intangible assets (excluding goodwill and before spectrum investment) and property, plant and equipment decreased by EUR 0.2 billion. Exchange rate effects weighed on the continuing positive business trend in the United States operating segment. In addition, positive effects from factoring agreements – in particular in the Germany and Systems Solutions operating segments – on net cash from operating activities were EUR 0.1 billion lower than in the prior-year period. In addition to a dividend payment of EUR 0.1 billion from BT (which was also included in the prior-year period), dividend payments totaling EUR 0.1 billion from Scout Lux and Toll Collect had a positive effect on net cash from operating activities. A EUR 0.4 billion decrease in net interest payments enhanced net cash from operating activities.

In the 2017 financial year, free cash flow of the Group before dividend payments and spectrum investment grew from EUR 4.9 billion in 2016 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 2017 financial year, 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 changes 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 amounted to 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 related to network modernization and the continued network build-out, including roll-out of the 4G/LTE network and the broadband/fiber-optic build-out.

In the 2016 financial year, free cash flow of the Group before dividend payments and spectrum investment grew from EUR 4.5 billion in 2015 to EUR 4.9 billion. Net cash from operating activities increased by EUR 0.5 billion. Cash outflows for investments in intangible assets (excluding goodwill and before spectrum investment) and property, plant and equipment also increased by EUR 0.1 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 2016 financial year, 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 0.8 billion and was thus comparable with the prior year. Cash inflows from the cancellation of, or changes in, the terms of interest rate derivatives had a positive effect of EUR 0.2 billion compared with the prior-year period. A year-on-year decrease of EUR 0.2 billion in cash outflows for income taxes also had a positive impact. Net cash from operating activities was negatively affected by a EUR 0.2 billion decrease in the dividend payment from the former EE joint venture. The dividend payment received from BT of EUR 0.1 billion was matched in the prior-year period by dividend payments of a corresponding amount received from the Scout24 group. In addition, net interest payments that were EUR 0.1 billion higher year-on-year had a negative impact on net cash from operating activities.

Step-Up Provisions

An improvement of our long-term senior unsecured debt ratings to A3 by Moody’s and A- by Standard & Poor’s or above would result in a 50 basis point decrease in interest rates due to the step-up provisions of certain bonds of the Group having an aggregate principal amount of approximately EUR 3.2 billion at March 31, 2018.

A lowering of our long-term senior unsecured debt ratings below Baa1 by Moody’s and BBB+ by Standard & Poor’s would result in a 50 basis point increase in interest rates due to the step-up provisions of certain bonds of the Group having an aggregate principal amount of approximately EUR 1.2 billion at March 31, 2018.

Lines of Credit

As of March 31, 2018, we had standardized bilateral lines of credit with 22 banks, totaling EUR 12.9 billion. As of March 31, 2018, EUR 1.1 billion of these credit lines had been utilized. According to the loan agreements, the terms and conditions depend on our credit rating. The bilateral credit agreements have an original maturity of 36 months and, after each period of 12 months, will be automatically extended for a further 12 months to renew the maturity of 36 months, if the lender does not object to such extension.

Our bilateral lines of credit do not include any financial covenants or material adverse change clauses. However, in the event we are taken over by a third-party, the individual lenders under these bilateral lines of credit and certain loan agreements to which we are also a party have the right to terminate the credit line and, if necessary, serve notice on it or demand repayment of the loans. A takeover is assumed when a third party, which can also be a group acting jointly, acquires control over us.

Research and Development

Research and development expenditure includes pre-production research and development, such as the search for alternative products, processes, systems, and services. However, we do not include under this item expenses for the development of system and user software aimed at enhancing productivity and making our business process more effective. In 2017, research and development expenditure in the Group amounted to EUR 57.7 million (2016: EUR 84.1 million).

In 2017, our investments in internally generated intangible assets to be capitalized also increased year-on-year at EUR 235.7 million compared with EUR 129.5 million for 2016. These investments predominantly related 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.

In 2016, our investments in internally generated intangible assets to be capitalized also increased year-on-year at EUR 129.5 million compared with EUR 101.3 million for the previous year. These investments predominantly related to internally developed software, mainly in our Systems Solutions operating segment. About 2,900 employees worked in the Group's R&D areas in 2016.

Development of Business in the Operating Segments

The following presents a discussion of the development of our business and operations in our individual operating segments, Germany, United States, Europe, System Solutions and Group Development, as well as our non-operating segment, Group Headquarters & Group Services, in the first quarter of 2018 and in the 2017 and 2016 financial years.

Germany

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 the Group's other operating segments. For more information on our segments, see "*Description of our Business and Operations—Group Organization—Organization*".

Customer Development

The following table provides information on our fixed-line and mobile operations in our Germany operating segment as of the dates indicated.

	March 31, 2018	Dec. 31, 2017	Change March 31, 2018/ Dec. 31, 2017	March 31, 2017	Change March 31, 2018/ March 31, 2017
	(in thousands)		(%)	(in thousands)	(%)
Total					
Mobile customers[1]	42,730	43,125	(0.9)	42,114	1.5
Contract customers	25,102	25,887	(3.0)	25,270	(0.7)
Prepay customers	17,628	17,238	2.3	16,844	4.7
Fixed-network lines[2, 3]	19,149	19,239	(0.5)	19,648	(2.5)
Of which: retail IP-based	12,843	11,996	7.1	9,801	31.0
Retail broadband lines[4]	13,357	13,209	1.1	12,989	2.8
Of which: optical fiber	6,232	5,803	7.4	4,693	32.8
Television (IPTV, satellite)	3,193	3,139	1.7	2,955	8.1
Unbundled local loop lines (ULLs)	5,846	6,138	(4.8)	6,952	(15.9)
Wholesale broadband lines	5,993	5,638	6.3	4,701	27.5
Of which: optical fiber	4,135	3,783	9.3	2,887	43.2

1 We count our mobile communications customers by the number of SIM cards activated and not churned. Our customer figures include the SIM cards with which machines can communicate with one another ("M2M"). In general, one SIM card corresponds to one customer. Twin cards (more than one SIM card with the same number and without any additional charge) are also accounted for as one customer. We count contract customers as customers for the length of their contracts and count prepay customers as customers as long as they continue to use our services, and then for a prescribed period thereafter, which differs by country. Generally, in the case of payment default or voluntary disconnection, the customers are cancelled or "churned" or, in case of no action on the part of the customer at the end of the period, the contract is prolonged.

2 In addition to the fixed-network lines of our consumers and business customers in Germany, this category includes lines provided by our Germany operating segment to our Systems Solutions operating segment, which are then sold to end customers, and lines used within the Group.

3 The baseline as of January 1, 2018 increased (by 62,000) due to the inclusion of new products launched in the Business Customer portfolio. Prior-year comparatives were not adjusted.

4 The baseline as of January 1, 2018 increased (by 53,000) due to the inclusion of new products launched in the Business Customer portfolio. Prior-year comparatives were not adjusted.

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

1 Adjusted to reflect changes in our reportable segments as of January 1, 2017. See "*Factors Affecting the Comparability of Results—Changes in Reportable Segments*".

2 We count our mobile communications customers by the number of SIM cards activated and not churned. Our customer figures include the SIM cards with which machines can communicate with one another ("M2M"). In general, one SIM card corresponds to one customer. Twin cards (more than one SIM card with the same number and without any additional charge) are also accounted for as one customer. We count contract customers as customers for the length of their contracts and count prepay customers as customers as long as they continue to use our services, and then for a prescribed period thereafter, which differs by country. Generally, in the case of payment default or voluntary disconnection, the customers are cancelled or "churned" or, in case of no action on the part of the customer at the end of the period, the contract is prolonged.

3 As of January 1, 2017, reporting of contract customers in business customer operations excludes test cards (minus 41,000). In addition, there was a one-time effect in the Business Customers segment from a change in system reporting for prepay customers (plus 180,000). Prior-year figures have not been adjusted.

4 In addition to the fixed-network lines of our consumers and business customers in Germany, this category includes lines provided by our Germany operating segment to our Systems Solutions operating segment, which are then sold to end customers, and lines used within the Group.

	Dec. 31, 2016[1]	Dec. 31, 2015[1]	Change	
	(in thousands)			(%)
Total				
Mobile customers[2]	41,849	40,373	1,476	3.7
Contract customers	25,219	23,709	1,510	6.4
Prepay customers	16,630	16,665	(35)	(0.2)
Fixed-network lines[3]	19,786	20,227	(441)	(2.2)
Of which: retail IP-based	9,042	6.887	2,155	31.3
Broadband lines	12,922	12,644	278	2.2
Of which: optical fiber	4,250	2,923	1,327	45.4
Television (IPTV, satellite)	2,879	2,683	196	7.3
Unbundled local loop lines (ULLs)	7,195	8,050	(855)	(10.6)
Wholesale unbundled lines	4,212	3,015	1,197	39.7
Of which: optical fiber	2,555	1,444	1,111	76.9
Wholesale bundled lines	165	227	(62)	(27.3)
Of which: Consumers				
Mobile customers[2]	29,225	29,016	209	0.7
Contract customers	18,476	17,297	1,179	6.8
Prepay customers	10,749	11,719	(970)	(8.3)
Fixed-network lines[3]	15,550	15,900	(350)	(2.2)
Of which: retail IP-based	7,722	6,076	1,646	27.1
Broadband lines	10,438	10,209	229	2.2
Of which: optical fiber	3,657	2,530	1,127	44.5
Television (IPTV, satellite)	2,686	2,492	194	7.8
Of which: Business Customers				
Mobile customers[2]	12,624	11,358	1,266	11.1
Contract customers	6,744	6,412	332	5.2
Prepay customers (M2M)[4]	5,880	4,946	934	18.9
Fixed-network lines[3]	3,255	3,339	(84)	(2.5)
Of which: retail IP-based	1,234	773	461	59.6
Broadband lines	2,101	2,093	8	0.4
Of which: optical fiber	575	385	190	49.4
Television (IPTV, satellite)	192	190	2	1.1

1 Reflects our reportable segments for the 2016 financial year (as reflected in our consolidated financial statements as of and for the year ended December 31, 2016). See "*Factors Affecting the Comparability of Results—Changes in Reportable Segments*".

2 We count our mobile communications customers by the number of SIM cards activated and not churned. Our customer figures include the SIM cards with which machines can communicate with one another ("M2M"). In general, one SIM card corresponds to one customer. Twin cards (more than one SIM card with the same number and without any additional charge) are also accounted for as one customer. We count contract customers as customers for the length of their contracts and count prepay customers as customers as long as they continue to use our services, and then for a

prescribed period thereafter, which differs by country. Generally, in the case of payment default or voluntary disconnection, the customers are cancelled or "churned" or, in case of no action on the part of the customer at the end of the period, the contract is prolonged.

[3] In addition to the fixed-network lines of our consumers and business customers in Germany, this category includes lines provided by our Germany operating segment to our Systems Solutions operating segment, which are then sold to end customers, and lines used within the Group.

[4] M2M: machine-to-machine.

Total

As of March 31, 2018, we continued to be the market leader in Germany both in terms of fixed-network and mobile revenues. We attribute this success to our high-performance networks in both fixed-network and mobile communications and our broad product portfolio.

As of March 31, 2018, 3.8 million customers have opted for our integrated product MagentaEINS (December 31, 2017: 3.6 million; December 31, 2016: 3.0 million), comprising fixed-network and mobile components.

In mobile communications, we lost a total of 395,000 customers (a decrease of 0.9 percent) in the first quarter of 2018, primarily due to seasonal business fluctuations at one of our services providers, following gains of 1.1 million customers (an increase of 2.6 percent) in 2017 and 1.5 million customers (an increase of 3.7%) in 2016, primarily by contract customers as a result of strong demand for mobile rate plans with integrated data volumes. In the first quarter of 2018 and in 2017, the number of contract customers under our Telekom and congstar brands grew, and we also recorded growth in the number of prepay customers.

By March 31, 2018, we had migrated 18.5 million retail and wholesale lines to IP (corresponding to a migration rate of 73 percent) in line with our goal to convert our entire network to IP technology by the end of 2018. The level of migration was 17.3 million (corresponding to 69 percent) as of December 31, 2017 and 12.9 million (corresponding to 53 percent) as of December 31, 2016.

Additionally, we continued to record strong demand for our fiber-optic products in the first quarter of 2018, with the number of these lines increasing by around 781,000, or 8.1 percent, over the period to a total of 10.4 million, following increases of 2.81 million, or 40.9 percent, to a total of 9.6 million over the 2017 financial year and 2.4 million, or 55.8 percent, to a total of 6.8 million over the 2016 financial year.

Mobile Communications

In the first quarter of 2018, we recorded net gains of 76,000 branded customer contracts (an increase of 0.4 percent) under the Telekom and constar brands and at Telekom Deutschland Multibrand GmbH, following gains of 676,000 (an increase of 10.1 percent) over the 2016 financial year and 614,000 (an increase of 26.4 percent) over the 2015 financial year. We attribute these gains to our high-performance networks and our broad product portfolio for high-value contract customers. The contract customer business of resellers (service providers) decreased by 923,000 over the first quarter of 2018, primarily due to seasonal business fluctuations at one of our service providers, after remaining at the prior-year level over the course of the 2017 financial year and increasing by 896,000 over the 2016 financial year. The number of prepay customers increased by 390,000, or 2.3 percent, in the first quarter of 2018 and by 428,000, or 3.7 percent, over the 2017 financial year, following a slight decrease of 35,000, or 0.2%, over the 2016 financial year.

Fixed Network

Due to the persistently challenging development in the fixed-network market, primarily owing to aggressive pricing offers of competitors, our marketing has focused on integrated offers as well as on TV and fiber-optic lines. In connection with this marketing campaign, the number of our broadband lines increased by 148,000, or 1.1 percent, over the course of the first quarter of 2018 (taking into account the increase of 53,000 due to the inclusion of the new products launched for business customers since the start of 2018), 287,000, or 2.2 percent, over the 2017 financial year, and 278,000, or 2.2 percent, over the course of the 2016 financial year. The number of our TV customers increased by 54,000, or 1.7 percent, in the first quarter of 2018, by 260,000, or 9.0 percent, over the 2017 financial year, and by 196,000, or 7.3 percent, over the 2016 financial year. In the traditional fixed network, the number of lines decreased by 152,000, or 7.9 percent, over the first quarter of 2018, by 547,000, or 2.8 percent, over the 2017 financial year, and by 441,000, or 2.2 percent, over the 2016 financial year.

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. As of March 31, 2018, 386,000 customers, primarily based in rural areas, have selected this rate plan (December 31, 2017: 370,000; December 31, 2016: 294,000).

As of March 31, 2018, we have also connected a total of 228,000 apartments (December 31, 2017: 218,000; December 31, 2016: around 164,000) to our network through our partnerships in the housing sector.

Consumers

As of the 2017 financial year, we no longer provide information relating to the segregation of "Consumers" and "Business Customers" in our reporting of customer development in our Germany operating segment.

In 2016, the number of mobile customers, whom we categorize as "Consumers", was on par with the prior-year level at 29.2 million. The number of prepay customers decreased by 970,000, or 8.3 percent, primarily as a result of some customers switching to our mobile contracts, for example to our cost-effective "congstar" rate plans. By contrast, we added 1.2 million mobile contract customers (an increase of 6.8 percent) over the course of the 2016 financial year, thanks mainly to our "More For More" initiative and the "Allnet Flat" rate plans at congstar. Contract customer business with reseller (service providers) also developed positively, increasing by 896,000 over the 2016 financial year.

In the fixed-network market, competition remained intense. In 2016, we migrated 1.6 million customers to IP-based lines in the fixed network, and gained 194,000 new television customers (corresponding to 7.8 percent). In 2016, of the 10.4 million broadband lines in total, 3.7 million were fiber-optic lines, representing an increase of 1.1 million, or 44.5 percent, over the course of the 2016 financial year.

Business Customers

As of the 2017 financial year, we no longer provide information relating to the segregation of "Consumers" and "Business Customers" in our reporting of customer development in our Germany operating segment.

In 2016, the positive trend in our "Business Customers" category continued. We recorded 1.3 million mobile customer additions (an increase of 11.1 percent) over the 2016 financial year, of which 332,000 were high-value contract customers. In mobile Internet, customers were increasingly opting for plans with more bandwidth, in conjunction with higher-quality terminal equipment. In a very aggressively priced market, we added 934,000 new M2M SIM cards (an increase of 18.9 percent) over the 2016 financial year. This growth was due to the increased use of SIM cards, especially in the automotive and logistics industries. As of December 31, 2016, the number of customers with fixed-network lines declined by2.5 percent compared with the end of 2015, and the number of broadband lines remained on the same level as at the end of 2015, with the number of fiber-optic lines increasing substantially by 49.4 percent.

In 2016, there was a positive trend in the demand for IT cloud products, where we recorded revenue growth of 9.3 percent. We also recorded growth in new IP-based products from our DeutschlandLAN product range, such as IP Start and IP Voice/Data.

Wholesale

As of March 31, 2018, the total number of lines in the wholesale sector was stable compared with the end of 2017 at 11.8 million, following an increase from 11.6 million at the end of 2016 and an increase from 11.3 million at the end of 2015. Fiber-optic lines accounted for 34.9 percent of all lines as of March 31, 2018 (2.8 percentage points higher than at the end of 2017), 32.1 percent of all lines at the end of 2017 (10.0 percentage points higher than the end of 2016) and 22.1 percent of all lines at the end of 2016 (9.3 percentage points higher than at the end of 2015). Our wholesale unbundled lines grew strongly by 1.3 million, or 31.5 percent, over the 2017 financial year, and by 1.2 million, or 39.7 percent, over the 2016 financial year. The growth was primarily attributable to the strong demand in connection with our contingent model, which consists of long-term contracts with defined advance payment and minimum purchase requirements as well as reduced monthly charges for VDSL, thereby allowing resellers to provide offers to their own consumers without having to invest in fiber-optic lines of their own. By contrast, the number of bundled wholesale lines decreased by 65,000 over the 2017 financial year and by 62,000 over the 2016 financial year. 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 292,000, or 4.8 percent, over the first quarter of 2016, by 1.1 million, or 14.7 percent, over the 2017 financial year, and by 855,000, or 10.6 percent, over the 2016 financial year. This decrease was due to the move to higher-quality fiber-optic wholesale lines, as well as to retail customers switching to cable operators. In addition, wholesale customers are migrating their retail customers to their own fiber-optic lines.

Development of Operations

	Q1 2018	Q1 2017	Change	
	(millions of €)			(%)
	(unaudited)			
Total revenue	**5,325**	**5,397**	**(72)**	**(1.3)**
Consumers	2,813	2,918	(105)	(3.6)
Business Customers[1]	1,491	1,465	26	1.8
Wholesale	932	926	6	0.6
Other[1]	90	88	2	2.3
Profit from operations (EBIT)	935	1,071	(136)	(12.7)
Depreciation, amortization and impairment losses	(980)	(935)	(45)	(4.8)
EBITDA	1,915	2,006	(91)	(4.5)
Special factors affecting EBITDA[2]	(167)	(49)	(118)	n.a.
Adjusted EBITDA	**2,082**	**2,055**	**27**	**1.3**
Cash capex	**(1,145)**	**(1,005)**	**(140)**	**(13.9)**

n.a. – not applicable

1 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 comparatives were not adjusted.

2 For more information on special factors affecting EBITDA, see "*Development of Business in the Group—Results of Operations of the Group—Reconciliation of EBITDA and adjusted EBITDA*".

	2017	2016[1]	Change	
	(millions of €)			(%)
	(unaudited, except as otherwise indicated)		(unaudited)	
Total revenue[2]	**21,931**	**21,774**	**157**	**0.7**
Consumers	11,797	11,739	58	0.5
Business Customers[3]	6,017	5,923	94	1.6
Wholesale	3,747	3,742	5	0.1
Other[3]	370	370	0	0.0
Profit from operations (EBIT)	4,334	3,624	710	19.6
Depreciation, amortization and impairment losses	(3,828)	(3,703)	(125)	(3.4)
EBITDA	8,162	7,327	835	11.4
Special factors affecting EBITDA[4]	(306)	(910)	604	66.4
Adjusted EBITDA	**8,468**	**8,237**	**231**	**2.8**
Cash capex[2]	**(4,214)**	**(4,031)**	**(183)**	**(4.5)**

1 Adjusted to reflect changes in our reportable segments as of January 1, 2017. See "*Factors Affecting the Comparability of Results—Changes in Reportable Segments*".

2 Audited.

3 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 comparatives were not adjusted.

4 For more information on special factors affecting EBITDA, see "*Development of Business in the Group—Results of Operations of the Group—Reconciliation of EBITDA and adjusted EBITDA*".

	2016[1]	2015[1]	Change	
	(millions of €)			(%)
	(unaudited, except as otherwise indicated)		(unaudited)	
Total revenue[2]	22,041	22,421	(380)	(1.7)
Consumers	11,739	12,146	(407)	(3.4)
Business Customers	5,923	5,942	(19)	(0.3)
Wholesale	3,753	3,685	68	1.8
Other	626	648	(22)	(3.4)
Profit from operations (EBIT)[2]	4,081	4,490	(409)	(9.1)
Depreciation, amortization and impairment losses	(3,809)	(3,755)	(54)	(1.4)
EBITDA	7,890	8,245	(355)	(4.3)
Special factors affecting EBITDA[3]	(910)	(545)	(365)	(67.0)
Adjusted EBITDA	**8,800**	**8,790**	**10**	**0.1**
Cash capex[2]	**(4,161)**	**(5,609)**	**1,448**	**25.8**

1 Reflects our reportable segments for the 2016 financial year (as reflected in our consolidated financial statements as of and for the year ended December 31, 2016). See "*Factors Affecting the Comparability of Results—Changes in Reportable Segments*".
2 Audited.
3 For more information on special factors affecting EBITDA, see "*Development of Business in the Group—Results of Operations of the Group—Reconciliation of EBITDA and adjusted EBITDA*".

Total Revenue

2018 First Quarter

In the first quarter of 2018, total revenue decreased by 1.3 percent compared with the prior-year quarter. Excluding the effects of the IFRS 15 accounting standard, the application of which was mandatory from January 1, 2018, total revenue developed in line with the prior year. In mobile business, revenue declined by 3.3 percent year-on-year; excluding the effects of IFRS 15, revenue increased slightly compared with the prior-year period. Higher IT and broadband revenues had a positive impact on fixed-network revenue. However, this was not quite sufficient to completely offset the decrease of 0.9 percent in fixed-network revenue compared with the first quarter of 2017.

Revenue from Consumers declined by 3.6 percent year-on-year; excluding the effects of IFRS 15, the decline was only marginal. Volume-related revenue decreases continued to drive the traditional fixed-network business. By contrast, revenue from broadband business increased by 3.7 percent.

Revenue from Business Customers grew by 1.8 percent. This growth was even stronger once adjusted for the effects of IFRS 15. Mobile revenues increased by 4.7 percent and IT revenues by 13.2 percent compared with the prior-year quarter. 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 in the first quarter of 2018 was 0.6 percent higher than in the comparable prior-year period, thanks primarily to higher revenues generated with our contingent model. Without the effects of IFRS 15, revenue growth would have been even stronger.

2017 Financial Year

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.

2016 Financial Year

In 2016, total revenue decreased by 1.7 percent compared with 2015. This development was driven mainly by non-contract terminal equipment revenue in mobile business, which decreased by 3.4 percent. Increased IT and broadband revenues had a positive impact on fixed-network revenue. However, this was not sufficient to completely offset declines in other areas, such that revenue in the fixed-network business decreased by 1.5 percent overall. Wholesale products developed positively, increasing by 2.3 percent year-on-year.

Revenue from Consumers declined by 3.4 percent compared with the prior year. Volume-related revenue decreases continued to dominate traditional fixed-network business, which declined by 2.0 percent, mainly due to lower variable charges and voice revenue. By contrast, revenue from broadband business increased by 1.7 percent. Mobile revenues declined by 5.1 percent, driven largely by terminal equipment business. Our mobile service revenues decreased by 0.7 percent compared with the prior-year level; however, the increase in service revenues under the congstar brand almost completely offset the decline in revenues from prepay business and from branded contract customers.

Revenue from Business Customers declined slightly by 0.3 percent. Mobile revenues grew slightly. Service revenues were at around the same level as in the prior year. In the fixed network, a decline was recorded in traditional voice telephony, due largely to the increasing number of customers moving to flat rate plans. By contrast, IT revenues developed particularly positively, though this was not enough to fully compensate for the loss of revenues from traditional telephony business.

Wholesale revenue was up 1.8 percent on the prior-year level, thanks primarily to higher revenues with unbundled lines, in particular as part of our contingent model.

Adjusted EBITDA, EBITDA

2018 First Quarter

In the first quarter of 2018, adjusted EBITDA totaled EUR 2.1 billion in the first quarter of 2018, generally in line with the same period of the previous year. EBITDA amounted to EUR 1.9 billion in the first quarter of 2018, a decrease of 4.5 percent against the prior-year quarter, due mainly to higher special factors for expenses in connection with our staff restructuring.

2017 Financial Year

In 2017, adjusted EBITDA increased by 2.8 percent compared with 2016 to EUR 8.5 billion, driven mainly by efficiency enhancement measures in all functions while revenue increased slightly. 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.

2016 Financial Year

In 2016, adjusted EBITDA remained stable compared with the prior-year level at EUR 8.8 billion. We were able to compensate for the loss of revenue with efficiency enhancement measures across all functions. EBITDA amounted to EUR 7.9 billion, a decline of 4.3 percent against the prior year, due mainly to higher special factors for expenses in connection with our staff restructuring. The take-up of the instrument of early retirement for civil servants in particular was substantially higher in the reporting year.

Profit from Operations

2018 First Quarter

In the first quarter of 2018, profit from operations decreased by 12.7 percent year-on-year to EUR 0.9 billion. Depreciation, amortization and impairment losses increased by 4.8 percent on account of sustained high investments in our network infrastructure.

2017 Financial Year

In 2017, 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.

2016 Financial Year

In 2016, profit from operations decreased by 9.1 percent to EUR 4.1 billion year-on-year. This was primarily attributable to higher expenses incurred in connection with staff-related measures and slightly higher depreciation and amortization.

Cash capex

2018 First Quarter

In the first quarter of 2018, cash capex increased year-on-year by 13.9 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.

2017 Financial Year

In 2017, 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.

2016 Financial Year

In 2016, cash capex was EUR 1.4 billion lower than in the prior year, due mainly to the spectrum auction in June 2015. Excluding spectrum investment, cash capex was up EUR 0.1 billion year-on-year. We made significant investments in the broadband and fiber-optic roll-out, our IP transformation, and our mobile infrastructure as part of our integrated network strategy.

United States

Our United States operating segment combines all mobile activities in the U. S. market. For more information on our segments, see "*Description of our Business and Operations—Group Organization—Organization*".

Customer Development

The following tables provide information on our mobile operations in the United States.

	March 31, 2018	Dec. 31, 2017	Change March 31, 2018/ Dec. 31, 2017	March 31, 2017	Change March 31, 2018/ March 31, 2017
	(in thousands)		(%)	(in thousands)	(%)
United States					
Mobile customers	74,040	72,585	2.0	72,597	2.0
Branded customers[1]	59,941	58,715	2.1	55,540	7.9
Branded postpaid[1]	39,065	38,047	2.7	35,341	10.5
Branded prepay[1]	20,876	20,668	1.0	20,199	3.4
Wholesale customers[2]	14,099	13,870	1.6	17,057	(17.3)

1 Due to changes in the consolidated group at the beginning of 2018, the number of branded postpaid customers increased by 13 thousand and the number of branded prepay customers increased by 9 thousand.

2 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 160 thousand and 4,638 thousand reported wholesale customers as of the beginning of the third quarter of 2017 and the beginning of the second quarter of 2017, respectively.

	Dec. 31, 2017	Dec. 31, 2016[1]	Change	(%)
	(in thousands)			
United States				
Mobile customers	72,585	71,455	1,130	1.6
Branded customers[2]	58,715	54,240	4,475	8.3
Branded postpaid[2]	38,047	34,427	3,620	10.5
Branded prepay[2]	20,668	19,813	855	4.3
Wholesale customers[2, 3]	13,870	17,215	(3,345)	(19.4)

1 Adjusted to reflect changes in our reportable segments as of January 1, 2017. See "*Factors Affecting the Comparability of Results—Changes in Reportable Segments*".

2 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 the 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.

3 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 as of the beginning of the second quarter of 2017.

	Dec. 31, 2016[1]	Dec. 31, 2015[1]	Change	(%)
	(in thousands)			
United States				
Mobile customers	71,455	63,282	8,173	12.9
Branded customers[2]	54,240	49,326	4,914	10.0
Branded postpaid[2]	34,427	31,695	2,732	8.6
Branded prepay[2]	19,813	17,631	2,182	12.4
Wholesale customers[2]	17,215	13,956	3,259	23.4

1 Reflects our reportable segments for the 2016 financial year (as reflected in our consolidated financial statements as of and for the year ended December 31, 2016). See "*Factors Affecting the Comparability of Results—Changes in Reportable Segments*".

2 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 the 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.

At March 31, 2018, the United States operating segment (T-Mobile US) had 74.0 million customers compared to 72.6 million customers at December 31, 2017. Net customer additions were 1.4 million for the first quarter of 2018 compared to 1.1 million net customer additions for the first quarter of 2017. At December 31, 2017, 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. At December 31, 2016, T-Mobile US had 71.5 million customers compared to 63.3 million customers at December 31, 2015. Net customer additions were 8.2 million for the year ended December 31, 2016, compared to 8.3 million net customer additions for the year ended December 31, 2015.

Branded Customers

For the first quarter of 2018, branded postpaid net customer additions were 1,005,000 compared to 914,000 branded postpaid net customer additions for the first quarter of 2017. The increase in branded postpaid net customer additions was primarily due to higher connected devices, the growing success of new segments such as T-Mobile for Business, continued growth in existing and greenfield markets, along with record postpaid churn performance. These increases were partially offset by the impact from more aggressive promotions during the first quarter of 2017, including T-Mobile US's launch of "Un-carrier Next – All Unlimited" with taxes and fees included, and increased competitive activity in the marketplace.

For the first quarter of 2018, branded prepay net customer additions were 199,000 compared to 386,000 branded prepay net customer additions for the first quarter of 2017. The decrease was due primarily to increased competitive activity in the marketplace and higher deactivations from a growing customer base, partially offset by a higher impact from the optimization of T-Mobile US's third party-distribution channels in the prior period, which began in the fourth quarter of 2016, resulting in lower churn, and lower migrations to branded postpaid plans.

For the year ended December 31, 2017, branded postpaid net customer additions were 3,620,000 compared to 4,097,000 branded postpaid net customer additions for the year ended December 31, 2016. The decrease was 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.

For the year ended December 31, 2017, branded prepay net customer additions were 855,000 compared to 2,508,000 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's third-party distribution channels.

For the year ended December 31, 2016, branded postpaid net customer additions, excluding the sale of marketing and distribution rights to certain of T-Mobile US's existing co-branded customers to a current wholesale partner (the MVNO Transaction), were 4,097,000 compared to 4,510,000 branded postpaid net customer additions for the year ended December 31, 2015. The decrease was primarily due to higher deactivations resulting from a growing branded postpaid customer base, partially offset by a lower branded postpaid churn rate as well as an increase in the number of qualified branded prepay customers migrating to branded postpaid plans.

For the year ended December 31, 2016, branded prepay net customer additions were 2,508,000 (excluding the MVNO Transaction) compared to 1,315,000 branded prepay net customer additions for the year ended December 31, 2015. The increase was due primarily to success of the MetroPCS brand, continued growth in new markets and distribution expansion, partially offset by an increase in the number of qualified branded prepay customers migrating to branded postpaid plans.

Wholesale Customers

For the first quarter of 2018, wholesale net customer additions were 229,000 compared to wholesale net customer deactivations of 158,000 for the first quarter of 2017. The increase was due primarily to lower customer deactivations driven by the removal of Lifeline program customers (described below), partially offset by lower M2M net customer additions.

Following the 2017 financial year, T-Mobile US announced that it believes current and future regulatory changes have made the Lifeline program offered by T-Mobile US's 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 4,528,000 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 1,183,000 for the year ended December 31, 2017, compared to wholesale net customer additions of 1,568,000 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. For the year ended December 31, 2016, wholesale net customer additions were 1,568,000 (excluding the MVNO Transaction) compared to wholesale net customer additions of 2,439,000 for the year ended December 31, 2015. The decrease was due primarily to higher deactivations from certain MVNO partners.

Development of Operations

	Q1 2018	Q1 2017	Change	
	(millions of €)			(%)
	(unaudited)			
Total revenue	**8,455**	**8,982**	**(527)**	**(5.9)**
Profit from operations (EBIT)	1,137	1,003	134	13.4
Depreciation, amortization and impairment losses	(1,223)	(1,387)	164	11.8
EBITDA	2,360	2,390	(30)	(1.3)
Special factors affecting EBITDA[1]	28	4	24	n.a.
Adjusted EBITDA	**2,332**	**2,386**	**(54)**	**(2.3)**
Cash capex	**(1,143)**	**(1,442)**	**299**	**20.7**

n.a. – not applicable

1 For more information on special factors affecting EBITDA, see "*Development of Business in the Group—Results of Operations of the Group—Reconciliation of EBITDA and adjusted EBITDA*".

	2017	2016[1]	Change	
	(millions of €)			(%)
	(unaudited, except as otherwise indicated)		(unaudited)	
Total revenue[2]	**35,736**	**33,738**	**1,998**	**5.9**
Profit from operations (EBIT)[2]	5,930	3,685	2,245	60.9
Depreciation, amortization and impairment losses	(5,019)	(5,282)	263	5.0
EBITDA	10,949	8,967	1,982	22.1
Special factors affecting EBITDA[3]	1,633	406	1,227	n.a.
Adjusted EBITDA	**9,316**	**8,561**	**755**	**8.8**
Cash capex[2]	**(11,932)**	**(5,855)**	**(6,077)**	**n.a.**

n.a. – not applicable

1 Adjusted to reflect changes in our reportable segments as of January 1, 2017. See "*Factors Affecting the Comparability of Results—Changes in Reportable Segments*".

2 Audited.

3 For more information on special factors affecting EBITDA, see "*Development of Business in the Group—Results of Operations of the Group—Reconciliation of EBITDA and adjusted EBITDA*".

	2016[1]	2015[1]	Change	
	(millions of €)			(%)
	(unaudited, except as otherwise indicated)		(unaudited)	
Total revenue[2]	**33,738**	**28,925**	**4,813**	**16.6**
Profit from operations (EBIT)[2]	3,685	2,454	1,231	50.2
Depreciation, amortization and impairment losses	(5,282)	(3,775)	(1,507)	(39.9)
EBITDA	8,967	6,229	2,738	44.0
Special factors affecting EBITDA[3]	406	(425)	831	n.a.
Adjusted EBITDA	**8,561**	**6,654**	**1,907**	**28.7**
Cash capex[2]	**(5,855)**	**(6,381)**	**526**	**8.2**

n.a. – not applicable

1 Reflects our reportable segments for the 2016 financial year (as reflected in our consolidated financial statements as of and for the year ended December 31, 2016). See "*Factors Affecting the Comparability of Results—Changes in Reportable Segments*".

2 Audited.

3 For more information on special factors affecting EBITDA, see "*Development of Business in the Group—Results of Operations of the Group—Reconciliation of EBITDA and adjusted EBITDA*".

Total Revenue

2018 First Quarter

Total revenue for the United States operating segment of EUR 8.5 billion in the first quarter of 2018 decreased by 5.9 percent compared to EUR 9.0 billion in the first quarter of 2017. In U.S. dollars, T-Mobile US's total revenues increased by 8.7 percent year-on-year due primarily to growth in service revenue from increases in T-Mobile US's average branded customer base from the growing success of new segments such as T-Mobile for Business, continued growth in existing and greenfield markets, record low churn, higher connected devices and the success of the MetroPCS brand. Additionally, equipment revenues increased due primarily to a higher average revenue per device sold, a positive impact from the obligatory first time adoption of IFRS 15 as of January 1, 2018 and proceeds from the liquidation of returned customer handsets, partially offset by a decrease in the number of devices sold, excluding purchased lease devices, lower lease revenues and a decrease from lower volumes of customer purchases of leased devices at the end of the lease term.

2017 Financial Year

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's total revenues increased by 8.1 percent year-on-year due primarily to service revenue growth resulting from increases in T-Mobile US's average branded customer base from strong customer response to T-Mobile US's "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's continued focus on equipment installment plan sales.

2016 Financial Year

Total revenue for the United States operating segment of EUR 33.7 billion in 2016 increased by 16.6 percent compared to EUR 28.9 billion in 2015. In U.S. dollars, T-Mobile US's total revenues increased by 16.3 percent year-on-year due primarily to service revenue growth resulting from increases in T-Mobile US's average branded customer base from strong customer response to T-Mobile US's "Un-carrier" initiatives, success of the MetroPCS brand and continued growth in new markets. Additionally, equipment revenues increased due primarily to higher lease revenues resulting from the launch of the "JUMP! On Demand" program at the end of the second quarter of 2015. With "JUMP! On Demand," revenues associated with leased devices are recognized over the term of the lease rather than when the device is delivered to the customer. An additional factor driving the increase in equipment revenues included an increase in the number of devices sold and a higher average revenue per device sold.

Adjusted EBITDA, EBITDA

2018 First Quarter

In euros, adjusted EBITDA decreased by 2.3 percent to EUR 2.3 billion in the first quarter of 2018, compared to EUR 2.4 billion in the first quarter of 2017. In U.S. dollars, adjusted EBITDA increased by 12.8 percent during the same period. Adjusted EBITDA increased due primarily to an increase in branded postpaid and prepay service revenues as discussed above, lower net losses on equipment sales, the positive impact from adoption of IFRS 15 and the positive net impact from hurricanes of USD 58 million, which included USD 94 million in reimbursements received from insurance carriers in the first quarter of 2018. These increases were partially offset by higher employee-related costs, costs related to outsourced functions and managed services, commissions, and higher costs associated with network expansion. In the first quarter of 2018 T-Mobile US continued to experience losses related to hurricanes, primarily from incremental costs to maintain T-Mobile US's operations in Puerto Rico. As of March 31, 2018, T-Mobile US expects additional expenses to be incurred in 2018, primarily related to T-Mobile US's operations in Puerto Rico. T-Mobile US continues to assess the damage and work with its insurance carriers to submit claims for property damage and business interruption.

EBITDA in the first quarter of 2018 included special factors of EUR 28 million compared to special factors of EUR 4 million in the first quarter of 2017. Overall, EBITDA in euros remained consistent at EUR 2.4 billion in the first quarter of 2018 and in the first quarter of 2017. In U.S. dollars, EBITDA increased to USD 2.9 billion in the first quarter of 2018, compared to USD 2.5 billion in the first quarter of 2017, due to the factors described above.

2017 Financial Year

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's "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 had not recognized any potential insurance recoveries related to those hurricane losses as it continued to assess the damage and hold discussions with its insurance carriers.

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 (reversal of impairment losses on non-current assets) 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.

2016 Financial Year

Adjusted EBITDA increased by 28.7 percent to EUR 8.6 billion in 2016, compared to EUR 6.7 billion in 2015. In U.S. dollars, adjusted EBITDA increased by 28.7 percent in 2016, compared to 2015. Adjusted EBITDA was positively impacted by increased branded postpaid and prepay service revenues resulting from strong customer response to T-Mobile US's "Un-carrier" initiatives and the ongoing success of promotional activities as well as lower losses on equipment due primarily to an increase in lease revenues, which are recognized over the lease term, resulting from the launch of T-Mobile US's "JUMP! On Demand" program at the end of the second quarter of 2015. Additionally, the costs of leased devices, which are capitalized and depreciated over the lease term, are excluded from adjusted EBITDA. Additionally, focused cost control and synergies realized from the decommissioning of the MetroPCS Code Division Multiple Access (CDMA) network contributed to the adjusted EBITDA increase during 2016. These effects were partially offset by an increase in strategic investments to support T-Mobile US's growing total customer base, including higher employee-related costs, higher commissions driven by an increase in T-Mobile US's branded customer additions and higher promotional costs. Adjusted EBITDA in 2016 excludes EUR 0.4 billion special factors primarily related to non-cash gains from spectrum license transactions, partially offset by costs relating to the decommissioning of the MetroPCS CDMA network and stock-based compensation costs.

Overall, EBITDA increased to EUR 9.0 billion in 2016, compared to EUR 6.2 billion in 2015 due to the factors described above, including the impact of special factors.

Profit from Operations

2018 First Quarter

Profit from operations increased to EUR 1.1 billion in the first quarter of 2018, compared to EUR 1.0 billion in the first quarter of 2017. In U.S. dollars, profit from operations increased by 31 percent during the same period, primarily driven by higher EBITDA. In U.S. dollars, depreciation remained stable on prior-year basis.

2017 Financial Year

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

2016 Financial Year

In 2016, profit from operations increased to EUR 3.7 billion compared to EUR 2.5 billion in 2015. This was driven by higher adjusted EBITDA, partially offset by higher depreciation expense related to devices leased under T-Mobile US's "JUMP! On Demand" program launched at the end of the second quarter of 2015, as well as increases from the continued build-out of T-Mobile US's 4G/LTE network, resulting in increased depreciation expense in 2016.

Cash Capex

2018 First Quarter

Cash capex decreased to EUR 1.1 billion in the first quarter of 2018, compared to EUR 1.4 billion in the first quarter of 2017. In U.S. dollars, cash capex decreased to USD 1.4 billion, compared to USD 1.5 billion during the same period due primarily to costs from T-Mobile US's build-out of 700 MHz spectrum in the first quarter of 2017, which was finalized in 2017.

2017 Financial Year

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 continued deployment of low band spectrum and begins deployment of 600 MHz spectrum.

2016 Financial Year

Cash capex decreased to EUR 5.9 billion in 2016, compared to EUR 6.4 billion in 2015, due primarily to EUR 2.2 billion of spectrum licenses acquired primarily through the U.S. FCC auction in January 2015 compared with payments of EUR 1.7 billion for the acquisition of spectrum licenses in 2016 as T-Mobile US continued to invest in network capex for the build-out of the 4G/LTE network.

Europe

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. For more information on our Europe segment, see "*Description of our Business and Operations—Group Organization—Organization*". Until (and including) the 2016 financial year, our reporting structure for our Europe operating segment also included our operations in the Netherlands. As of January 1, 2017, our operations in the Netherlands is included in our Group Development operating segment.

Customer Development

The following table provides information on our fixed-line and mobile operations in our Europe operating segment.

	March 31, 2018 (in thousands)	Dec. 31, 2017 (in thousands)	Change March 31, 2018/ Dec. 31, 2017 (%)	March 31, 2017 (in thousands)	Change March 31, 2018/ March 31, 2017 (%)
Europe, total					
Mobile customers[1]	49,254	48,842	0.8	47,348	4.0
Contract customers	25,686	25,483	0.8	24,482	4.9
Prepay customers	23,567	23,359	0.9	22,866	3.1
Fixed-network lines	8,409	8,439	(0.4)	8,486	(0.9)
Of which: IP-based	5,947	5,734	3.7	5,190	14.6
Retail broadband lines[2]	5,821	5,647	3.1	5,444	6.9
Television (IPTV, satellite, cable)	4,271	4,244	0.6	4,100	4.2
Unbundled local loop lines (ULLs)/wholesale PSTN	2,270	2,265	0.2	2,269	–
Wholesale broadband lines	389	389	–	376	3.5
Greece					
Mobile customers	8,053	7,981	0.9	7,733	4.1
Fixed-network lines	2,551	2,547	0.2	2,547	0.2
Broadband lines	1,901	1,843	3.1	1,708	11.3
Romania					
Mobile customers	5,236	5,258	(0.4)	5,428	(3.5)
Fixed-network lines	1,823	1,865	(2.3)	1,937	(5.9)
Broadband lines	1,210	1,182	2.4	1,186	2.0
Hungary					
Mobile customers	5,298	5,293	0.1	5,304	(0.1)
Fixed-network lines	1,634	1,632	0.1	1,630	0.2
Broadband lines	1,118	1,105	1.2	1,053	6.2
Poland					
Mobile customers	10,509	10,454	0.5	10,229	2.7
Fixed-network lines	27	32	(15.6)	33	(18.2)
Broadband lines	13	15	(13.3)	20	(35.0)
Czech Republic					
Mobile customers	6,156	6,176	(0.3)	6,097	1.0
Fixed-network lines	220	197	11.7	143	53.8
Broadband lines	180	167	7.8	136	32.4
Croatia					
Mobile customers	2,229	2,244	(0.7)	2,210	0.9
Fixed-network lines	959	967	(0.8)	992	(3.3)
Broadband lines	832	783	6.3	795	4.7
Slovakia					
Mobile customers	2,282	2,243	1.7	2,230	2.3
Fixed-network lines	860	858	0.2	854	0.7
Broadband lines	681	669	1.8	649	4.9
Austria					
Mobile customers	6,071	5,702	6.5	4,713	28.8
Other[4]					
Mobile customers	3,419	3,490	(2.0)	3,404	0.4
Fixed-network lines	334	340	(1.8)	351	(4.8)
Broadband lines	275	274	0.4	276	(0.4)

[1] We count our mobile communications customers by the number of SIM cards activated and not churned. Our customer figures include the SIM cards with which machines can communicate with one another ("M2M"). In general, one SIM card corresponds to one customer. Twin cards (more than one SIM card with the same number and without any additional charge) are also accounted for as one customer. We count contract customers as customers for the length of their contracts and count prepay customers as customers as long as they continue to use our services, and

then for a prescribed period thereafter, which differs by country. Generally, in the case of payment default or voluntary disconnection, the customers are cancelled or "churned" or, in case of no action on the part of the customer at the end of the period, the contract is prolonged.

2 Retail broadband lines were reclassified as of January 1, 2018. This category now covers all lines based on broadband technology irrespective of which service is used by the customer. Prior-year comparatives were not adjusted.

3 Other: national companies of Albania, Macedonia, and Montenegro, as well as the lines of the GTS Central Europe group in Romania.

	Dec. 31, 2017 (in thousands)	Dec. 31, 2016[1] (in thousands)	Change (in thousands)	Change (%)
Europe, total				
Mobile customers[2]	48,842	47,952	890	1.9
Contract customers	25,483	24,315	1,168	4.8
Prepay customers	23,359	23,637	(278)	(1.2)
Fixed-network lines	8,439	8,531	(92)	(1.1)
Of which: IP-based	5,734	5,016	718	14.3
Retail broadband lines	5,647	5,393	254	4.7
Television (IPTV, satellite, cable)	4,244	4,049	195	4.8
Unbundled local loop lines (ULLs)/wholesale PSTN	2,265	2,259	6	0.3
Wholesale bundled lines	143	123	20	16.3
Wholesale unbundled lines	246	247	(1)	(0.4)
Greece				
Mobile customers	7,981	7,725	256	3.3
Fixed-network lines	2,547	2,564	(17)	(0.7)
Broadband lines	1,843	1,682	161	9.6
Romania				
Mobile customers	5,258	5,722	(464)	(8.1)
Fixed-network lines	1,865	1,969	(104)	(5.3)
Broadband lines	1,182	1,194	(12)	(1.0)
Hungary				
Mobile customers	5,293	5,332	(39)	(0.7)
Fixed-network lines	1,632	1,629	3	0.2
Broadband lines	1,105	1,040	65	6.3
Poland				
Mobile customers	10,454	10,634	(180)	(1.7)
Fixed-network lines	32	20	12	60.0
Broadband lines	15	16	(1)	(6.3)
Czech Republic				
Mobile customers	6,176	6,049	127	2.1
Fixed-network lines	197	140	57	40.7
Broadband lines	167	134	33	24.6
Croatia				
Mobile customers	2,244	2,234	10	0.4
Fixed-network lines	967	1,001	(34)	(3.4)
Broadband lines	783	783	0	0.0
Slovakia				
Mobile customers	2,243	2,225	18	0.8
Fixed-network lines	858	850	8	0.9
Broadband lines	669	638	31	4.9
Austria				
Mobile customers	5,702	4,594	1,108	24.1
Other[3]				
Mobile customers	3,490	3,438	52	1.5
Fixed-network lines	340	358	(18)	(5.0)
Broadband lines	274	279	(5)	(1.8)

1 Adjusted to reflect changes in our reportable segments as of January 1, 2017. See "*Factors Affecting the Comparability of Results—Changes in Reportable Segments*".

2 We count our mobile communications customers by the number of SIM cards activated and not churned. Our customer figures include the SIM cards with which machines can communicate with one another ("M2M"). In general, one SIM card corresponds to one customer. Twin cards (more than one SIM card with the same number and without any additional charge) are also accounted for as one customer. We count contract customers as customers for the length of their contracts and count prepay customers as customers as long as they continue to use our services, and then for a prescribed period thereafter, which differs by country. Generally, in the case of payment default or voluntary disconnection, the customers are cancelled or "churned" or, in case of no action on the part of the customer at the end of the period, the contract is prolonged.

3 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.

	Dec. 31, 2016[1] (in thousands)	Dec. 31, 2015[1] (in thousands)	Change (in thousands)	Change (%)
Europe, total[2, 3]				
Mobile customers[4]	51,699	52,737	(1,038)	(2.0)
Fixed-network lines	8,695	8,763	(68)	(0.8)
Of which: IP-based	5,180	4,132	1,048	25.4
Retail broadband lines	5,557	5,189	368	7.1
Television (IPTV, satellite, cable)	4,049	3,905	144	3.7
Unbundled local loop lines (ULLs)/wholesale PSTN	2,259	2,239	20	0.9
Wholesale bundled lines	123	121	2	1.7
Wholesale unbundled lines	247	199	48	24.1
Greece				
Mobile customers	7,725	7,399	326	4.4
Fixed-network lines	2,564	2,586	(22)	(0.9)
Broadband lines	1,682	1,531	151	9.9
Romania				
Mobile customers	5,722	5,992	(270)	(4.5)
Fixed-network lines	1,969	2,091	(122)	(5.8)
Broadband lines	1,194	1,186	8	0.7
Hungary				
Mobile customers	5,332	5,504	(172)	(3.1)
Fixed-network lines	1,629	1,674	(45)	(2.7)
Broadband lines	1,040	1,023	17	1.7
Poland[2]				
Mobile customers	10,634	12,056	(1,422)	(11.8)
Fixed-network lines	20	18	2	11.1
Broadband lines	16	15	1	6.7
Czech Republic				
Mobile customers	6,049	6,019	30	0.5
Fixed-network lines	140	154	(14)	(9.1)
Broadband lines	134	134	–	–
Croatia				
Mobile customers	2,234	2,233	1	0.0
Fixed-network lines	1,001	1,004	(3)	(0.3)
Broadband lines	783	741	42	5.7
Netherlands[3]				
Mobile customers	3,746	3,677	69	1.9
Fixed-network lines	164	n.a.	164	n.a.
Broadband lines	164	n.a.	164	n.a.
Slovakia				
Mobile customers	2,225	2,235	(10)	(0.4)
Fixed-network lines	850	855	(5)	(0.6)
Broadband lines	638	599	39	6.5
Austria				
Mobile customers	4,594	4,323	271	6.3
Other[5]				
Mobile customers	3,438	3,299	139	4.2
Fixed-network lines	358	381	(23)	(6.0)
Broadband lines	279	285	(6)	(2.1)

n.a. – not applicable

1 Reflects our reportable segments for the 2016 financial year (as reflected in our consolidated financial statements as of and for the year ended December 31, 2016). See "*Factors Affecting the Comparability of Results—Changes in Reportable Segments*".

2 In the fourth quarter of 2015, the number of mobile customers in Poland decreased by 3,838 thousand in connection with the deactivation of inactive prepaid SIM cards.

3 In the fourth quarter of 2016, the number of fixed-network and broadband lines in the Netherlands grew as a result of the acquisition of Vodafone's fixed-network consumer business.

4 We count our mobile communications customers by the number of SIM cards activated and not churned. Our customer figures include the SIM cards with which machines can communicate with one another ("M2M"). In general, one SIM card corresponds to one customer. Twin cards (more than one SIM card with the same number and without any additional charge) are also accounted for as one customer. We count contract customers as customers for the length of their contracts and count prepay customers as customers as long as they continue to use our services, and then for a prescribed period thereafter, which differs by country. Generally, in the case of payment default or voluntary disconnection, the customers are cancelled or "churned" or, in case of no action on the part of the customer at the end of the period, the contract is prolonged.

5 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.

Total

In the first quarter of 2018 and over the course of the 2017 and 2016 financial years, the market environment in Europe was dominated by intense competition. Thanks in part to our convergent product portfolio Magenta ONE, we recorded substantial growth in the number of fixed-mobile convergence (FMC) customers of 9.1 percent in the first quarter of 2018, 58.5 percent in 2017, and 55.5 percent in 2016. Our TV business has also established itself as a consistent revenue growth driver, due to the wide variety of TV services we offer our customers and also our ability to deliver high bandwidths using the right combination of technologies. As of the first quarter of 2018, our broadband business also continued to develop as a consistent revenue driver. In the mobile communications business, we saw continued growth, with the number of high-value contract customers increasing by 0.8 percent in the first quarter of 2018, by 4.8 percent in 2017, and by 2.3 percent in 2016. We attribute this growth to our high speed services combined with a broad rate portfolio that includes the latest and most high-performance smartphones. 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 following the successful migration from traditional PSTN lines to IP technology.

Mobile Communications

At the end of the first quarter of 2018, the number of mobile customers totaled 49.3 million, a slight increase of 412,000 customers, or 0.8 percent, compared with the end of 2017. The growth trend among contract customers continued unabated, with the customer base increasing slightly by 203,000 customers, or 0.8 percent, due mainly to the positive customer development at our national companies in Poland, Romania, and the Czech Republic. The total share of contract customers thus remained largely stable at 52.2 percent as of March 31, 2018. In addition to our innovative services/rate plans, thanks to our integrated network strategy our customers also benefited from greater coverage with fast mobile broadband. As of March 31, 2018, we already covered 95 percent of the population in the countries of our operating segment with LTE, reaching around 107 million people in total. We believe that the importance of making high bandwidths available is evident in the sharp rise seen in data consumption, driven by huge volumes of data traffic, generated for example by the use of video streaming services. The share of all mobile devices sold accounted for by smartphones remained at a high level. In prepay business, the signs are also pointing towards growth: The increases reported in the last two quarters of 2017 continued in the first quarter of 2018 with a rise of 0.9 percent or 208,000 customers. Our national companies in Austria, Greece, and Slovakia contributed to this growth.

As of the end of December 2017, we had a total mobile customer base of 48.8 million – a 1.9 percent increase 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 about 1.2 million net contract additions, or 4.8 percent, continuing the growth trend. 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 provide evidence that our customers actually used 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.

As of the end of 2016, we had a total mobile customer base of 51.7 million – a 2.0 percent decrease compared with 2015. This decline was in line with our expectations and was attributable to customer losses in the prepay business, which was under pressure due to intense competition. Competition in this segment continued to intensify further following the introduction of a prepay registration requirement by the Polish government at the end of July 2016. We successfully implemented our strategy of focusing on high-value contract customers, recording an increase of 3.2 percent in this customer segment, which corresponds to growth of around 841,000 customers. The growth in the number of contract customers seen over the past few quarters continued through the fourth quarter of 2016. Virtually all of our national companies, predominantly in Austria, the Netherlands, and Romania, contributed to the positive development in contract customer business. At the end of 2016, contract customers accounted for 52.8 percent of the total customer base. We attribute this success to our high-performance networks. We positioned ourselves in the relevant markets as a quality provider with the best service – and in many countries also as the provider with the best mobile network. Part of our network strategy is to systematically build out our mobile networks with 4G/LTE technology to increase transmission rates in all our national companies. Thanks to investments in our 4G/LTE network, our customers enjoy better network coverage with fast mobile broadband. By the end of 2016, we already covered 84 percent of the population in the countries of our operating segment with LTE, thus reaching more than 109 million people in total. Not only the high level of data volumes used, but also the sales figures for mobile devices provide evidence that our customers actually used these high bandwidths, with smartphones accounting for an even higher proportion in 2016 – 79 percent – of all devices sold compared with the prior year.

Fixed Network

Our TV and entertainment offerings have developed into a mainstay of our consumer business. In the first quarter of 2018, our TV and entertainment service grew by 0.6 percent compared with the end of 2017 and by 4.2 percent year-on-year. Of the 171 thousand net additions, the majority were recorded by our national companies in Hungary, Slovakia, and the Czech Republic. As of December 31, 2017, 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 – 195,000 – at our national companies in Hungary, Slovakia and Greece. As of December 31, 2016, the number of TV customers grew by 3.7 percent to 4.0 million compared with the end of 2015, with the majority of the net customer additions – 144,000 – at our national companies in Greece, Slovakia, Romania, and Croatia. With both telecommunication providers and OTT players offering TV services in the countries of our segment, the TV market there is highly contested.

The number of retail broadband lines increased by 3.1 percent to a total of 5.8 million, a portion of which was due to the reclassification of retail broadband lines as of January 2018. Fiber-optic-based lines accounted for the majority of net customer additions, growing considerably faster than DSL business. Romania, Hungary, and Croatia were the main contributors to this growth. We continued to increase our overall fiber-optic coverage, with our national companies reaching around 33 percent of households as of March 31, 2018. This success bears out our continued investment in forward-looking, fiber optic-based technologies.

As an integrated telecommunications provider, we offer our convergent product portfolio, Magenta ONE, to customers in all our integrated countries. As of March 31, 2018, we had won about 2.4 million FMC customers in the Consumers portfolio, an increase of 9.1 percent compared to the end of 2017, and an increase of 51.1 percent when compared with the first quarter of the prior year. Our national companies in Greece, Hungary, and Romania were the main drivers of this trend. By December 31, 2017, we had already gained 2.2 million FMC customers in total, with demand rising substantially in Greece in particular. As of December 31, 2016, we had already gained more than 1.4 million FMC customers in total, primarily in Greece, Romania, Croatia, and Slovakia. We have also 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 March 31, 2018, we recorded 5.9 million IP-based lines, an increase of 3.7 percent compared to the end of 2017, and amounting to 70.7 percent of all fixed-network lines. The total number of fixed-network lines in our Europe operating segment decreased only slightly overall compared with the end of 2017 to 8.4 million at the end of the first quarter of 2018. As of December 31, 2017, we recorded 5.7 million IP-based lines – a 14.3 percent increase compared with the prior year. IP lines accounted for around 67.9 percent of all fixed-network lines at the end of 2017. 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 2017. As of December 31, 2016, we recorded 5.2 million IP-based lines – a 25.4 percent increase compared with 2015. At the segment level, IP-based lines accounted for around 60 percent of all lines as of the end of 2016, significantly more than PSTN-based lines. In our Europe operating segment, 8.7 million customers used a fixed-network line at the end of 2016, putting the number of fixed-network lines almost in line with the prior-year level. In the fourth quarter of 2016, we acquired Vodafone's fixed-network consumer business in the Netherlands.

The number of retail broadband lines continued to grow, which we attribute to our continued investment in forward-looking, fiber optic-based technologies. Over the first quarter of 2018, retail broadband lines increased by 3.1 percent to a total of 5.8 million, 111,000 of which was due to the reclassification of retail broadband lines as of January 2018. Fiber-optic-based lines accounted for the majority of net customer additions, growing considerably faster than DSL business. Romania, Hungary, and Croatia were the main contributors to this growth in the first quarter of 2018. We continued to increase our overall fiber-optic coverage, with our national companies reaching around 33 percent of households as of March 31, 2018. Over the 2017 financial 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 in 2017. We continued to increase our overall fiber-optic coverage, with our national companies reaching around 32 percent of households as of December 31, 2017. Over the 2016 financial year, The number of retail broadband lines increased by 7.1 percent to a total of 5.6 million. The percentage of fiber-optic lines recorded double-digit growth compared with the end of 2015, and in 2016 the number of net customer additions was higher than in DSL business for the first time ever. This growth was driven primarily by our national companies in Romania, Hungary, and Slovakia. We continued to increase our overall fiber-optic coverage, with our national companies reaching 25.6 percent of households as of December 31, 2016.

Development of Operations

	Q1 2018	Q1 2017	Change	
	(millions of €)			(%)
	(unaudited)			
Total revenue[1]	**2,811**	**2,781**	**30**	**1.1**
Greece	686	690	(4)	(0.6)
Romania	226	230	(4)	(1.7)
Hungary	443	415	28	6.7
Poland[1]	375	364	11	3.0
Czech Republic	254	237	17	7.2
Croatia	222	224	(2)	(0.9)
Slovakia	181	183	(2)	(1.1)
Austria	218	228	(10)	(4.4)
Other[2]	253	260	(7)	(2.7)
Profit from operations (EBIT)	345	324	21	6.5
Depreciation, amortization and impairment losses	(559)	(553)	(6)	(1.1)
EBITDA	905	877	28	3.2
Special factors affecting EBITDA[3]	(7)	(12)	5	41.7
Adjusted EBITDA[1]	**911**	**889**	**22**	**2.5**
Greece	280	266	14	5.3
Romania	33	37	(4)	(10.8)
Hungary	121	109	12	11.0
Poland[1]	96	100	(4)	(4.0)
Czech Republic	111	100	11	11.0
Croatia	85	84	1	1.2
Slovakia	80	77	3	3.9
Austria	76	89	(13)	(14.6)
Other[2]	28	28	–	–
Cash capex	**(438)**	**(475)**	**37**	**7.8**

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

1 The business of T-Systems Polska Sp. z o.o., which, in organizational terms, was previously 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.

2 Other: national companies of Albania, Macedonia, and Montenegro, as well as IWS (International Wholesale), consisting of ICSS (International Carrier Sales & Solutions) and its national companies, the GTS Central Europe group in Romania, and the Europe Headquarters.

3 For more information on special factors affecting EBITDA, see "*Development of Business in the Group—Results of Operations of the Group—Reconciliation of EBITDA and adjusted EBITDA*".

	2017	2016[1]	Change	
	(millions of €)			(%)
	(unaudited, except as otherwise indicated)		(unaudited)	
Total revenue[2]	**11,589**	**11,454**	**135**	**1.2**
Greece	2,846	2,883	(37)	(1.3)
Romania	972	985	(13)	(1.3)
Hungary	1,808	1,673	135	8.1
Poland[3]	1,509	1,488	21	1.4
Czech Republic	1,011	959	52	5.4
Croatia	955	925	30	3.2
Slovakia	748	766	(18)	(2.3)
Austria	900	855	45	5.3
Other[4]	1,069	1,132	(63)	(5.6)
Profit from operations (EBIT)[2]	462	1,184	(722)	(61.0)
Depreciation, amortization and impairment losses	(3,157)	(2,589)	(568)	(21.9)
EBITDA	3,619	3,773	(154)	(4.1)
Special factors affecting EBITDA[5]	(130)	(93)	(37)	(39.8)
Adjusted EBITDA	**3,749**	**3,866**	**(117)**	**(3.0)**
Greece	1,135	1,120	15	1.3
Romania	166	175	(9)	(5.1)
Hungary	545	539	6	1.1
Poland[3]	419	482	(63)	(13.1)
Czech Republic	406	400	6	1.5
Croatia	386	374	12	3.2
Slovakia	315	302	13	4.3
Austria	266	258	8	3.1
Other[4]	110	215	(105)	(48.8)
Cash capex[2]	**(1,874)**	**(2,600)**	**726**	**27.9**

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

1 Adjusted to reflect changes in our reportable segments as of January 1, 2017. See "*Factors Affecting the Comparability of Results—Changes in Reportable Segments*".

2 Audited.

3 The business of T-Systems Polska Sp. z o.o., which, in organizational terms, was previously 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.

4 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.

5 For more information on special factors affecting EBITDA, see "*Development of Business in the Group—Results of Operations of the Group—Reconciliation of EBITDA and adjusted EBITDA*".

	2016[1]	2015[1]	Change	(%)
	(millions of €)			
	(unaudited, except as otherwise indicated)		(unaudited)	
Total revenue[2]	**12,747**	**13,024**	**(277)**	**(2.1)**
Greece	2,883	2,878	5	0.2
Romania	985	984	1	0.1
Hungary	1,673	1,848	(175)	(9.5)
Poland	1,488	1,544	(56)	(3.6)
Czech Republic	959	958	1	0.1
Croatia	925	909	16	1.8
Netherlands	1,331	1,394	(63)	(4.5)
Slovakia	766	783	(17)	(2.2)
Austria	855	829	26	3.1
Other[3]	1,126	1,136	(10)	(0.9)
Profit from operations (EBIT)[2]	717	1,476	(759)	(51.4)
Depreciation, amortization and impairment losses	(3,246)	(2,632)	(614)	(23.3)
EBITDA	3,963	4,108	(145)	(3.5)
Special factors affecting EBITDA[4]	(131)	(221)	90	40.7
Adjusted EBITDA	**4,094**	**4,329**	**(235)**	**(5.4)**
Greece	1,120	1,118	2	0.2
Romania	175	205	(30)	(14.6)
Hungary	540	526	14	2.7
Poland	482	580	(98)	(16.9)
Czech Republic	399	390	9	2.3
Croatia	374	367	7	1.9
Netherlands	358	500	(142)	(28.4)
Slovakia	302	296	6	2.0
Austria	258	259	(1)	(0.4)
Other[3]	85	88	(3)	(3.4)
Cash capex[2]	**(2,764)**	**(1,667)**	**(1,097)**	**(65.8)**

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

1 Reflects our reportable segments for the 2016 financial year (as reflected in our consolidated financial statements as of and for the year ended December 31, 2016). See "*Factors Affecting the Comparability of Results—Changes in Reportable Segments*".

2 Audited.

3 Other: national companies of Albania, the F.Y.R.O. Macedonia, and Montenegro, as well as ICSS (International Carrier Sales & Solutions), the ICSS/GNF business of the local business units, GNF (Global Network Factory), GTS Central Europe group in Romania, Europe Headquarters, Group Technology, and Pan-Net.

4 For more information on special factors affecting EBITDA, see "*Development of Business in the Group—Results of Operations of the Group—Reconciliation of EBITDA and adjusted EBITDA*".

Total Revenue

2018 First Quarter

Our Europe operating segment generated total revenue of EUR 2.8 billion in the first quarter of 2018, a slight year-on-year increase of 1.1 percent. In organic terms, *i.e.*, assuming constant exchange rates, revenue was in line with the level recorded in the prior-year quarter. The mandatory first-time application of the IFRS 15 accounting standard as of January 1, 2018 did not have a material effect on the development of revenues at the segment level.

Business Customer operations recorded substantial revenue growth, mainly due to the positive trend in ICT business in Hungary. Mobile communications revenue also increased slightly year-on-year. Most of the countries in our operating segment contributed to this growth. Fixed-network revenues at the segment level decreased overall year-on-year due to the decline in wholesale business offsetting the positive revenue effect from TV and broadband business, mainly in Greece and Hungary. Intense competition on the telecommunications markets as well as lower EU roaming charges had a negative impact on our revenue in many countries of our Europe operating segment.

Revenue from Consumers increased by 2.2 percent compared with the first quarter of 2017, driven mainly by mobile business. Revenue from fixed-network business rose, too, on the strength of the trend in TV and broadband operations driven by our innovative TV and program management activities. In addition, strong growth in the number of FMC customers had a positive impact on revenue. Overall, this offset a revenue decline primarily attributable to voice telephony.

In Business Customers operations, especially ICT, we recorded year-on-year growth in the first quarter of 2018. Our Smart City projects in particular supported this trend with their IoT revenue contribution. and our ICT business in Hungary again put in a strong performance. Our core business continued to grow as well, with business customer numbers rising year-on-year in our mobile communications portfolio.

Wholesale revenue declined year-on-year due in part to lower revenues in some companies, as well as to international wholesale business, in particular following the latest changes to EU roaming regulation.

Considered by country, our national company in Hungary made the largest contribution to the organic development of revenue in the first quarter of 2018, more than offsetting the decline in revenues in particular in Austria, Greece, and Romania.

2017 Financial Year

Our Europe operating segment generated total revenue of EUR 11.6 billion in 2017, a slight increase year-on-year of 1.2 percent. Revenue was 0.5 percent higher on the prior-year figure in organic terms, *i.e.*, assuming constant exchange rates and the same organizational structure in 2016 as in 2017, which excludes the Netherlands.

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 upward trend 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 2017. Our B2B/ICT business customer operations also recorded a year-on-year increase in revenues in 2017, mainly thanks to the particularly strong results from 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 2017 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 the 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.

2016 Financial Year

Our Europe operating segment generated total revenue of EUR 12.7 billion in 2016, a year-on-year decrease of 2.1 percent. In organic terms, *i.e.*, excluding the spin-off of the energy resale business in Hungary as of January 1, 2016 and assuming constant exchange rates, revenue declined by 0.5 percent, putting it generally in line with the prior-year level. Excluding the development of business in the Netherlands, organic revenue in the Europe operating segment would have been exactly at the prior-year level.

Decisions of the regulatory authorities – such as the imposition of lower roaming charges in many of the countries in our Europe operating segment and, especially in Hungary, reduced mobile termination rates – also had an impact on our organic revenues in 2016. Intense competition in the telecommunications markets of our national companies also had a negative impact.

Our national companies have aligned themselves with the strategic growth areas mobile data, broadband, TV, ICT and energy and recorded a 2.5 percent increase in revenues in this field, partially offsetting the slight decline in revenues at segment level. Thus the growth areas accounted for 31.0 percent of segment revenue. Revenue from mobile data business increased by 5.6 percent year-on-year to EUR 1.8 billion. Most countries of our Europe operating segment made a contribution to this growth, especially Austria, the Czech Republic, Hungary, and Greece. Absolute revenue growth from mobile data business was largely attributable to consumers. Data service usage rates continue to see strong growth, mainly among contract customers, due to the availability of high bandwidths and attractive rate plans in conjunction with a large portfolio of terminal equipment. Thanks to our innovative TV and program management, the TV business continued its upward trend of the past few quarters: In 2016, TV revenue increased by 9.4 percent to EUR 466 million. TV revenue accounted for about 41 percent of the revenue increase in our growth areas and was our second strongest driver of growth, preceded only by mobile data business. Despite the ongoing realignment of our core business with key growth areas, our B2B/ICT business with business customers posted lower revenue.

In addition to the growth areas, we recorded higher visitor revenues (*i.e.*, revenues from third parties for roaming in our home network) and higher terminal equipment revenues. Wholesale business also contributed to the increase in revenue, due primarily to the volume-driven rise in call terminations.

From a country perspective, the decline in business in the Netherlands had the strongest impact on the organic development of revenue in 2016. Reduced charges on account of the roaming regulation and competition-driven price reductions – both in voice telephony and in data business – had a negative impact on revenue development. A substantial rise in net customer additions in the third and fourth quarter of 2016 started to have a positive effect. Higher visitor revenues also made a positive contribution. Our national company in Slovakia also recorded a decline in revenue, primarily in fixed-network business. Revenues from voice telephony and in B2B/ICT business decreased. This was only partially offset by the increase in revenue from TV and mobile business, in particular as a result of a rise in data revenues. The national companies in Austria, Croatia, Greece, and Poland made particularly positive contributions to organic segment revenue, thereby almost completely offsetting the declines.

Material Developments Relating to Total Revenue in Respect of Certain Countries in Our Europe Operating Segment

<u>Greece</u>

In the first quarter of 2018, revenue in Greece stood at EUR 686 million, just 0.6 percent below the prior-year quarter. Higher mobile communications revenue was not enough to fully offset negative effects in the fixed-network portfolio: Whereas broadband and B2B/ICT business continued to grow, revenue from wholesale and TV business declined.

In the 2017 financial year, the revenue in Greece, at EUR 2.8 billion, was only slightly lower than in 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 higher 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 the 2016 financial year, revenue in Greece totaled EUR 2.9 billion, putting it in line with the prior-year level. The positive revenue trend in the fixed-network business offset the decline in mobile business. The TV business in particular proved to be a steady growth driver once again, as our innovative TV services offering an expansive variety of channels resulted in double-digit customer growth. As a result, TV revenue also increased by 31 percent compared with the prior year, despite a tax levied by the government on pay TV. Our FMC product CosmoteOne also contributed to revenue growth. Broadband business also benefited from the increased number of DSL lines. Our B2B/ICT business customer operations remained stable at the prior-year level. Overall, we more than offset the negative effects from the decline in voice telephony.

The continuing strained economic situation, intense competition, and new tax legislation had a negative effect on mobile revenues in 2016. The price- and volume-driven decline in revenue from voice telephony in particular impacted negatively on service revenues. This was only partially compensated for by stronger growth in the customer base. Rising revenues from mobile data services, as a result of higher data volumes and higher visitor revenues, among other factors, had a positive effect on service revenues. By contrast, revenue from the sale of mobile terminal equipment declined.

<u>Hungary</u>

In the first quarter of 2018, revenue in Hungary grew by 6.7 percent compared with the prior year to EUR 443 million. In organic terms, it increased by 7.6 percent. This growth was driven by the fixed-network business with sustained clear revenue growth in the B2B/ICT business customer operations. Broadband, TV, and terminal equipment business also made a positive contribution to total revenue. Our FMC offering, MagentaOne, remained very popular among consumers and business customers, evidenced by a growing customer base and an increase in revenue. Service revenues as well as terminal equipment business performed well, which was also attributable to our high-speed, high-reach mobile network.

In 2017, revenue in Hungary 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.

In 2016, revenue in Hungary decreased by 9.5 percent year-on-year to EUR 1.7 billion. In organic terms, *i.e.*, excluding the spin-off of the energy resale business in Hungary as of January 1, 2016 and assuming constant exchange rates, segment revenue remained virtually stable. In mobile communications, significantly higher revenues from sales of mobile terminal equipment completely offset the slight decline in service revenues, which was due to the following offsetting effects. Lower mobile termination rates and roaming regulation charges contributed to a reduction in voice revenues. This was contrasted by higher revenues from mobile data services, which increased by 7.6 percent compared with 2015. Our high-speed, high-reach mobile data network also had a positive effect on this development. By contrast, the fixed-network business continued to decline due to decreased revenue from our B2B/ICT business with business customers and from voice services. TV and broadband business developed well and contributed positively to total revenues. The number of broadband lines increased gradually, due in particular to the roll-out of fiber-optic lines. Our TV business also profited from this, attracting customers with its innovative services across all screens and by the variety of channels. The MagentaOne FMC offering in the consumer and business customer segments also contributed to this trend.

<u>Austria</u>

In the first quarter of 2018, our national company in Austria generated revenue of EUR 218 million, a 4.4 percent decline year-on-year. This was largely attributable to a high positive non-recurring effect from voice telephony business in the prior-year quarter. Excluding this effect, revenue development would have remained stable. To meet growing demand for broadband Internet access, the national company in Austria will transform into an integrated challenger with mobile and fixed-network infrastructure following the take-over of the cable and fixed-network business from UPC Austria (subject to the approval of the antitrust authorities). This is expected to allow us to offer fixed-network technology in the near future, in addition to the mobile broadband Internet services already being successfully marketed to our customers.

In 2017, we generated revenue of EUR 900 million in Austria, a 5.3 percent increase 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.

In 2016, we generated revenue of EUR 855 million in Austria, a year-on-year increase of 3.1 percent. This increase was largely attributable to higher revenue from mobile data business: The rise in contract customer additions increased the usage of data services. Data services accounted for 28 percent of total revenue. Visitor revenues also had a positive effect on revenue development. Overall, these positive revenue effects more than offset the decrease in revenue from text messaging services and the sale of mobile terminal equipment. Voice telephony revenue was on a par with the prior-year level.

<u>Poland</u>

In the first quarter of 2018, revenue in Poland grew 3.0 percent year-on-year to EUR 375 million; in organic terms, it was in line with the prior-year period. We thus continued to stabilize the revenue trend in Poland. Revenue from B2B/ICT business was higher, while revenue from mobile business was lower.

Adjusted EBITDA, EBITDA

<u>2018 First Quarter</u>

In the first quarter of 2018, our Europe operating segment generated adjusted EBITDA of EUR 911 million, an increase of 2.5 percent compared to the prior-year period. In organic terms, *i.e.*, assuming constant exchange rates, adjusted EBITDA increased by 1.6 percent. The mandatory application of the new IFRS 15 accounting standard effective January 1, 2018 did not have a material effect on the development of adjusted EBITDA. Savings in indirect costs, including lower personnel costs in Greece, were the main factor in this increase. In terms of direct costs, market investments and costs relating to the B2B/ICT operations increased. In addition, regulatory effects, including the cuts to EU roaming charges, also reduced adjusted EBITDA.

Considering the development by country, the increase in adjusted EBITDA was largely attributable to the positive trends in our national companies in Greece, Hungary, the Czech Republic, and Slovakia. Offsetting developments were reported mainly at the national companies in Austria, Poland, and Romania.

EBITDA decreased substantially by 3.2 percent year-on-year to EUR 905 million, due primarily to the increase in adjusted EBITDA with special factors having no material effect. In organic terms, EBITDA grew by 2.2 percent.

2017 Financial Year

In 2017, our Europe operating segment generated adjusted EBITDA of EUR 3.7 billion, a year-on-year decrease of 3.0 percent. In organic terms, *i.e.*, assuming constant exchange rates and adjusting the comparative period to also include 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 the segment level. From a country perspective, the slight decline in organic adjusted EBITDA was 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.

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.

2016 Financial Year

In 2016, our Europe operating segment generated adjusted EBITDA of EUR 4.1 billion, a year-on-year decrease of 5.4 percent. In organic terms, *i.e.*, excluding the spin-off of the energy resale business in Hungary as of January 1, 2016 and assuming constant exchange rates, adjusted EBITDA decreased by 4.9 percent. Excluding the development of business in the Netherlands, organic adjusted EBITDA in our Europe operating segment declined by 1.9 percent. As a result, we did not quite meet our expected adjusted EBITDA target of EUR 4.3 billion. We attribute this to two causes: first, due to the fact that the lower level of organic revenues at segment level in general had a negative effect on adjusted EBITDA, and second, due to the impact of higher direct costs resulting from higher interconnection costs, higher market investments, and other factors. Legislative changes such as those affecting taxes and duties, government austerity programs, in Greece for example, and decisions by regulatory authorities also played a part in this context.

From a country perspective, the decline in adjusted EBITDA was attributable mainly to the developments in our national companies in the Netherlands, Poland, and Romania, as well as to mobile business in Greece. By contrast, the adjusted EBITDA generated in particular in the national companies in Hungary, the Czech Republic, Slovakia, and Croatia, as well as in the fixed-network business in Greece, increased.

EBITDA decreased 3.5 percent year-on-year to EUR 4.0 billion due to two main effects. In the prior year, EBITDA had been affected by higher negative special factors, while the decline in adjusted EBITDA in 2016 had the opposite effect.

Material Developments Relating to EBITDA and Adjusted EBITDA in Respect of Certain Countries in Our Europe Operating Segment

Greece

In the first quarter of 2018, adjusted EBITDA in Greece increased year-on-year by 5.3 percent to EUR 280 million. Thanks to increased cost efficiency, especially in regard to personnel costs, we more than offset the decline in revenues.

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.

In 2016, adjusted EBITDA in Greece remained stable at EUR 1.1 billion. The slight increase in direct costs was more than offset by savings in indirect costs, primarily as a result of lower personnel costs.

Hungary

In the first quarter of 2018, adjusted EBITDA in Hungary increased by 11.0 percent year-on-year to EUR 121 million, driven by the revenue growth. This increase was also evident in organic adjusted EBITDA.

In 2017, adjusted EBITDA in Hungary increased by 1.1 percent year-on-year to EUR 545 million. In organic terms, adjusted EBITDA remained almost unchanged.

In 2016, adjusted EBITDA in Hungary increased by 2.7 percent year-on-year to EUR 540 million. Organically, adjusted EBITDA was 3.6 percent higher as a result of stable revenues, lower direct costs, and savings in indirect costs

Austria

In the first quarter of 2018, adjusted EBITDA in Austria, which decreased by 14.6 percent to EUR 76 million year-on-year, was impacted by the decline in revenue. Increased market investments contributed to this trend. Adjusted for the high positive non-recurring effect from voice telephony business in the prior-year quarter, adjusted EBITDA decreased only slightly.

In 2017, adjusted EBITDA in Austria increased by 3.1 percent to EUR 266 million, reflecting the revenue trend.

In 2016, adjusted EBITDA in Austria remained at the prior-year level at EUR 258 million. Higher revenue offset an increase in direct costs attributable to market investments. Indirect costs were higher compared with 2015.

Poland

In the first quarter of 2018, adjusted EBITDA in Poland stood at EUR 96 million, a 4.0 percent decline year-on-year. In organic terms, adjusted EBITDA declined by 6.9 percent, mainly due to regulation-induced higher interconnection and roaming costs.

Profit from Operations

2018 First Quarter

Profit from operations in our Europe operating segment in the first quarter of 2018 increased significantly by 6.5 percent to EUR 345 million due mainly to the positive development of EBITDA. Depreciation, amortization and impairment losses increased only slightly by 1.1 percent to EUR 559 million.

2017 Financial Year

In 2017, profit from operations in our Europe operating segment decreased by 61.0 percent 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. This resulted from the year-end impairment tests in Poland, Albania, and Romania, but mainly relating to Poland. In the prior year, impairment losses on goodwill and on property, plant and equipment, primarily in Romania, reduced profit from operations by EUR 0.2 billion overall.

2016 Financial Year

In 2016, profit from operations in our Europe operating segment decreased by 51.4 percent to EUR 0.7 billion. This was attributable largely 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 0.6 billion resulting from the year-end impairment tests, primarily in the Netherlands and Romania.

Cash Capex

2018 First Quarter

In the first quarter of 2018, our Europe operating segment reported cash capex of EUR 438 million. The decline of EUR 37 million is largely attributable to restrained investment activities in most of our national companies. By contrast, in some countries we invested more heavily in the broadband and fiber-optic roll-out as part of our integrated network strategy. As in the prior-year quarter, we acquired a small number of spectrum licenses in the first quarter of 2018.

2017 Financial Year

In 2017, 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.

2016 Financial Year

In 2016, our Europe operating segment reported cash capex of EUR 2.8 billion, an increase of EUR 1.1 billion, mainly due to the acquisition in 2016 of mobile spectrum in Poland, the Czech Republic, and Montenegro as well as the frequency extension in the Netherlands.

Systems Solutions

As a leading information and communication technology (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. For more information on our Systems Solutions segment, see "*Description of our Business and Operations—Group Organization—Organization*".

Selected Data

The following tables provide information data related to T-Systems' business development.

		March 31, 2018	Dec. 31, 2017	Change (%) March 31, 2018/ Dec. 31, 2017	March 31, 2017	Change (%) March 31, 2018/ March 31, 2017
Order Entry	**(millions of €)**	**1,506**	**5,241**	**n.a.**	**1,274**	**18.2**

n.a. – not applicable
p.p. – percentage points

		Dec. 31, 2017	Dec. 31, 2016[1]	Change	Change (%)
Order Entry	**(millions of €)**	**5,241**	**6,851**	**(1,610)**	**(23.5)**

p.p. – percentage points
1 Adjusted to reflect changes in our reportable segments as of January 1, 2017. See "*Factors Affecting the Comparability of Results—Changes in Reportable Segments*".

		Dec. 31, 2016[1]	Dec. 31, 2015[1]	Change	Change (%)
Order Entry	**(millions of €)**	**6,605**	**5,608**	**997**	**17.8**
Computing & Desktop Services					
Number of servers managed and serviced	units	74,336	62,590	11,746	18.8
Number of workstations managed and serviced	**(millions)**	1.77	1.71	0.06	3.5
Systems Integration					
Hours billed	(millions)	7.1	5.3	1.8	34.0
Utilization rate	%	83.3	82.9		0.4. p.p.

p.p. – percentage points
1 Reflects our reportable segments for the 2016 financial year (as reflected in our consolidated financial statements as of and for the year ended December 31, 2016). See "*Factors Affecting the Comparability of Results—Changes in Reportable Segments*".

Development of Business

As part of the ongoing realignment of our Systems Solutions operating segment, we are focusing not only on established IT and telecommunications business, but on expanding our strategic growth areas in digitalization business, *e.g.*, digital solutions, cloud computing, the Internet of Things, and security. This is proceeding in parallel with an observable market shift away from traditional IT business and toward cloud computing and digitalization. Strategic partnerships remain a key component of our plan to build on these strategic growth areas, For example, we offer our partners' services from our data centers in Germany. In addition, as a means of strengthening our telecommunications portfolio, we are using our global partner alliance ngena (Next Generation Enterprise Network Alliance) to quickly provide our customers with international network connections and services. Security and high availability play a key role in this respect – both for our customers and for us. The transformation of our Systems Solutions operating segment into a digital partner for our customers continues, with our digitalization solutions serving as the main pillars of this new architecture, flanked by appropriate security solutions and simultaneous support for existing infrastructures and applications.

In the first quarter of 2018, order entry at our Systems Solutions operating segment was positive, rising 18.2 percent year-on-year. The positive order entry trend was observable not only for IT and telecommunications, but also for digitalization business.

In the 2017 financial year, order entry at our Systems Solutions operating segment declined markedly by 23.5 percent year-on-year and was well below our expectations for 2017. 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 mentioned above, which resulted in shorter terms of contract.

In 2016, our Systems Solutions operating segment experienced a slight downward trend compared with the prior year, although our Market Unit profited from the completion of the set-up phase of our corporate customer project to build and operate an electronic toll collection system in Belgium. Strengthened by our realignment, we performed particularly well with our standard solutions from the growth area of cloud computing.

We successfully secured further new deals in Germany and abroad in 2016. The order volume was higher than expected in the reporting period, increasing by 17.8 percent. While we had indeed forecast an increase, growth was actually stronger than anticipated. This was attributable, on the one hand, to delays with order entries that we had expected in 2015 and, on the other, to two additional major contracts that we signed at the end of 2016 and that were not included in our initial planning. To meet the requirements from the new deals, we continually modernized and consolidated our ICT resources. Thus the number of servers managed and serviced increased by 18.8 percent compared with 2015. At the data centers, technical advances made it possible to set up ever larger and higher-performance units, which had a positive impact on our cost efficiency. The number of workstations managed and serviced increased by 3.5 percent year-on-year.

Development of Operations

	Q1 2018	**Q1 2017**	**Change**	
	(millions of €)			**(%)**
	(unaudited, except as otherwise indicated)			
Total revenue	**1,665**	**1,704**	**(39)**	**(2.3)**
External revenue	1,332	1,369	(37)	(2.7)
Profit (loss) from operations (EBIT)	(76)	(37)	(39)	n.a.
Depreciation, amortization and impairment losses	(95)	(98)	3	3.1
EBITDA	19	61	(42)	(68.9)
Special factors affecting EBITDA[1]	(38)	(35)	(3)	(8.6)
Adjusted EBITDA	**57**	**96**	**(39)**	**(40.6)**
Cash capex	**(83)**	**(86)**	**3**	**3.5**

n.a. – not applicable

[1] For more information on special factors affecting EBITDA, see "*Development of Business in the Group—Results of Operations of the Group—Reconciliation of EBITDA and adjusted EBITDA*".

	2017[1]	2016[2]	Change	(%)
	(millions of €)			
	(unaudited, except as otherwise indicated)		(unaudited)	
Total revenue[3]	**6,918**	**6,993**	**(75)**	**(1.1)**
External revenue	5,504	5,678	(174)	(3.1)
Loss from operations (EBIT)[3]	(1,356)	(150)	(1,206)	n.a.
Depreciation, amortization and impairment losses	(1,636)	(428)	(1,208)	n.a.
EBITDA	280	278	2	0.7
Special factors affecting EBITDA[4]	(229)	(252)	23	9.1
Adjusted EBITDA	**509**	**530**	**(21)**	**(4.0)**
Cash capex[3]	**(383)**	**(402)**	**19**	**4.7**

n.a. – not applicable

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

2 Adjusted to reflect changes in our reportable segments as of January 1, 2017. See "*Factors Affecting the Comparability of Results—Changes in Reportable Segments*".

3 Audited.

4 For more information on special factors affecting EBITDA, see "*Development of Business in the Group—Results of Operations of the Group—Reconciliation of EBITDA and adjusted EBITDA*".

	2016[1]	2015[1]	Change	(%)
	(millions of €)			
	(unaudited, except as otherwise indicated)		(unaudited)	
Total revenue[2]	**7,907**	**8,194**	**(287)**	**(3.5)**
Loss from operations (EBIT)[2]	(330)	(541)	211	39.0
Depreciation, amortization and impairment losses	(575)	(634)	59	9.3
EBITDA	245	93	152	n.a.
Special factors affecting EBITDA[3]	(337)	(647)	310	47.9
Adjusted EBITDA	**582**	**740**	**(158)**	**(21.4)**
Cash capex[2]	**(1,058)**	**(1,151)**	**93**	**8.1**

n.a. – not applicable

1 Reflects our reportable segments for the 2016 financial year (as reflected in our consolidated financial statements as of and for the year ended December 31, 2016). See "*Factors Affecting the Comparability of Results—Changes in Reportable Segments*".

2 Audited.

3 For more information on special factors affecting EBITDA, see "*Development of Business in the Group—Results of Operations of the Group—Reconciliation of EBITDA and adjusted EBITDA*".

Total Revenue

2018 First Quarter

In the first quarter of 2018, total revenue in our Systems Solutions operating segment was slightly lower year-on-year at EUR 1.7 billion. This was primarily due to declining revenues from our traditional IT portfolio. Compared with the same period in 2017, there was a noticeable decline in revenue from international corporate customers, also due to the general market contraction and to price erosion in our core market of Western Europe. By contrast, our telecommunications revenues rose 7.5 percent year-on-year. Strategic growth areas such as digitalization – *e.g.*, cloud computing, the Internet of Things, and security – also exhibited a positive trend, posting revenue growth relative to the prior-year quarter.

2017 Financial Year

In 2017, 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 Telekom Security unit generated revenue as well.

2016 Financial Year

In 2016, total revenue in our Systems Solutions operating segment amounted to EUR 7.9 billion, a year-on-year decrease of 3.5 percent. Revenue of our Market Unit, *i.e.*, essentially our business with external customers, declined by 2.9 percent compared with 2015 to EUR 6.5 billion. Both national and international revenue in this unit declined, despite the completion of the set-up phase of the toll collection system in Belgium in the first quarter of 2016. The general downward price trend in ICT business and exchange rate effects had a negative impact on the Market Unit's revenue.

In our Telekom IT business unit, which mainly pools our Group's domestic internal IT activities, revenue stood at EUR 1.4 billion, a decrease of 6.1 percent. This planned decrease against prior years was attributable to further IT cost savings made by our Group.

Adjusted EBITDA, EBITDA

2018 First Quarter

In the first quarter of 2018, adjusted EBITDA at our Systems Solutions operating segment declined by EUR 39 million to EUR 57 million, which was in line with our expectations. In addition to higher costs incurred to expand the strategic growth areas in digitalization business – which includes cloud computing, the Internet of Things and security – the main cause of this decline was the pressure on margins caused by a reduction in the scope of individual corporate customer contracts for traditional IT business. Earnings from our telecommunications portfolio in the reporting period were roughly in line with the same period last year, despite the impact of the ongoing migration to all-IP.

EBITDA decreased by EUR 42 million year-on-year to EUR 19 million, mainly due to the effects described under adjusted EBITDA.

2017 Financial Year

In 2017, our Systems Solutions operating segment recorded adjusted EBITDA of EUR 509 million compared with EUR 530 million in the prior year, a decrease of 4.0 percent. Excluding the non-recurring effect from the completion of the set-up phase of the toll collection system in Belgium in 2016, 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 2017, increasing by 0.7 percent year-on-year.

2016 Financial Year

In 2016, adjusted EBITDA in our Systems Solutions operating segment was 21.4 percent lower than in 2015. The Market Unit's EBITDA contribution declined by EUR 51 million year-on-year, mainly due to the accounting treatment of risks from individual corporate customer contracts. Measures we introduced to cut costs and enhance efficiency, and the positive billing effect after the completion of the set-up phase of the toll system in Belgium only partially offset this effect. Telekom IT posted adjusted EBITDA of EUR 68 million. This year-on-year decrease of EUR 91 million was mainly due to further IT cost savings made by the Group. The adjusted EBITDA margin of our Systems Solutions operating segment decreased from 9.0 percent in the prior year to 7.4 percent.

EBITDA increased in 2016 by EUR 152 million compared with the prior year to EUR 245 million, mainly as a result of a EUR 310 million decrease in special factors, primarily due to restructuring programs in the prior year.

Profit (loss) from Operations

2018 First Quarter

In the first quarter of 2018, loss from operations in our Systems Solutions operating segment increased by EUR 39 million to a loss of EUR 76 million. The effects described above under adjusted EBITDA for the first quarter of 2018 were the main drivers of this decrease. Depreciation, amortization and impairment losses were at the same level as a year earlier.

2017 Financial Year

In 2017, loss from operations increased by EUR 1.2 billion against the prior year to a loss of EUR 1.4 billion. The decline in order entry prompted impairment testing of the assets in the third quarter of 2017. As a result, an impairment loss on goodwill of EUR 1.2 billion was recognized.

2016 Financial Year

In 2016, loss from operations decreased by EUR 211 million, or 39.0 percent, compared with 2015 to a loss of EUR 330 million, mainly due to the non-recurrence of restructuring programs in the prior year as well as lower depreciation, amortization and impairment losses due to the migration of IT platforms.

Cash Capex

2018 First Quarter

In the first quarter of 2018, cash capex in the Systems Solutions operating segment stood at EUR 83 million compared with EUR 86 million in the prior-year period. Our capital expenditures remain focused on developing our strategic growth areas in digitalization business – such as digital solutions, cloud computing, the Internet of Things and security – and on expanding our European toll collection system.

2017 Financial Year

In 2017, cash capex in the Systems Solutions operating segment stood at EUR 383 million, EUR 19 million lower than the prior year. Our consistently high level of capital expenditure was 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 increased the need for investment.

2016 Financial Year

In 2016, cash capex decreased by 8.1 percent year-on-year, due to enhanced efficiency, for example as a result of the standardization of the ICT platforms and the consolidation of data centers. Our level of investment remained high at EUR 1.1 billion and is attributable to the increasing advancement of the digitization of enterprises. For this reason, we invested in growth areas and in digital innovation areas, such as digital transformation and the Internet of Things, cloud computing, and cyber security.

Group Development

As of January 1, 2017, our reportable segments has included the Group Development operating segment, which 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 June 2017 (all previously part of our Group Headquarters & Group Services segment). For more information on our Group Development operating segment, see "*Description of our Business and Operations—Group Organization—Organization*". Because our Group Development operating segment was not included in our reporting for the years 2016 or 2015, no information on the development of Group Development in the 2016 financial year is provided.

Customer Development

The following table provides information on our fixed-line and mobile operations in the Netherlands.

	March 31, 2018 (in thousands)	Dec. 31, 2017 (in thousands)	Change March 31, 2018/ Dec. 31, 2017 (%)	March 31, 2017 (in thousands)	Change March 31, 2018/ March 31, 2017 (%)
Netherlands					
Mobile customers	3,905	3,850	1.4	3,789	3.1
Fixed-network lines	198	191	3.7	176	12.5
Broadband lines	198	191	3.7	176	12.5

	Dec. 31, 2017 (in thousands)	Dec. 31, 2016 (in thousands)	Change (in thousands)	(%)
Netherlands				
Mobile customers	3,850	3,746	104	2.8
Fixed-network lines	191	164	27	16.5
Broadband lines	191	164	27	16.5

After successfully repositioning itself in the market, T-Mobile Netherlands posted growth of 1.4 percent in the first quarter of 2018, with its mobile portfolio for consumers and business customers. 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, but also to business customer net additions. The number of customers in the fixed-network consumer portfolio also grew, by 3.7 percent.

Thanks to its successful repositioning in the market, T-Mobile Netherlands' mobile business for both consumers and business customers grew 2.8 percent in 2017. 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

	Q1 2018	Q1 2017	Change	
	(millions of €)			(%)
	(unaudited)			
Total revenue	**528**	**595**	**(67)**	**(11.3)**
Netherlands	309	341	(32)	(9.4)
Profit (loss) from operations (EBIT)	148	686	(538)	(78.4)
Depreciation, amortization and impairment losses	(78)	(71)	(7)	(9.9)
EBITDA	227	758	(531)	(70.1)
Special factors affecting EBITDA[1]	(5)	519	(524)	n.a.
Adjusted EBITDA	**231**	**238**	**(7)**	**(2.9)**
Netherlands	108	110	(2)	(1.8)
Cash capex	**(85)**	**(81)**	**(4)**	**(4.9)**

n.a. – not applicable

1 For more information on special factors affecting EBITDA, see "*Development of Business in the Group—Results of Operations of the Group—Reconciliation of EBITDA and adjusted EBITDA*".

	2017	2016[1]	Change	
	(millions of €)			(%)
	(unaudited, except as otherwise indicated)		(unaudited)	
Total revenue[2]	**2,263**	**2,347**	**(84)**	**(3.6)**
Netherlands	1,355	1,331	24	1.8
Loss from operations (EBIT)[2]	1,504	2,730	(1,226)	(44.9)
Depreciation, amortization and impairment losses	(304)	(760)	456	60.0
EBITDA	1,808	3,490	(1,682)	(48.2)
Special factors affecting EBITDA[3]	893	2,547	(1,654)	(64.9)
Adjusted EBITDA	**915**	**943**	**(28)**	**(3.0)**
Netherlands	421	358	63	17.6
Cash capex[2]	**(290)**	**(271)**	**(19)**	**(7.0)**

1 Reflects our reportable segments as of January 1, 2017. See "*Factors Affecting the Comparability of Results—Changes in Reportable Segments*".

2 Audited.

3 For more information on special factors affecting EBITDA, see "*Development of Business in the Group—Results of Operations of the Group—Reconciliation of EBITDA and adjusted EBITDA*".

Total Revenue

2018 First Quarter

In the first quarter of 2018, total revenue in our Group Development operating segment decreased by 11.3 percent year-on-year. This decline was attributable, on the one hand, to the revenue foregone following the sale of Strato AG as of March 31, 2017 and, on the other hand, to the mandatory application of IFRS 15 as of January 1, 2018 and to the effects of regulatory intervention, *e.g.*, lower EU roaming charges and national termination rates, at T-Mobile Netherlands. Revenue at Deutsche Funkturm (DFMG) was unchanged against the prior-year period.

2017 Financial Year

In 2017, 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 AG 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.

Adjusted EBITDA, EBITDA

2018 First Quarter

In the first quarter of 2018, adjusted EBITDA in our Group Development operating segment declined by 2.9 percent year-on-year. Forgone earnings following the deconsolidation of Strato AG were the main cause of this decline. Adjusted EBITDA at T-Mobile Netherlands decreased by 1.8 percent in the first quarter of 2018 owing to first-time application of IFRS 15 and to the effects of regulatory intervention.

EBITDA in our Group Development operating segment decreased in the first quarter of 2018 by EUR 0.5 billion year-on-year to EUR 0.2 billion. Regular reviews of our investment portfolio prompted us to sell our stake in Strato AG in 2017. The divestiture resulted in income of EUR 0.5 billion, which had been recognized as special factors in the first quarter of 2017.

2017 Financial Year

In 2017, adjusted EBITDA in our Group Development operating segment was 3.0 percent lower year-on-year, with forgone earnings following the sale of Strato AG 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 2017. 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 a significant reduction in overhead costs brought about by the transformation program.

EBITDA in 2017 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 aiming to ensure adequate corporate growth. A consequence of this policy was our sale of Strato AG, effective as ofMarch 31, 2017, and of the remaining shares in Scout24 AG, effective as of 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.

Profit from Operations

2018 First Quarter

In the first quarter of 2018, profit from operations decreased by EUR 0.5 billion year-on-year to EUR 0.1 billion, due to the same factors described under EBITDA for the first quarter of 2018. Depreciation, amortization and impairment losses were higher than in the prior-year period, mainly due to higher capital expenditure on network capacity and quality at T-Mobile Netherlands.

2017 Financial Year

In 2017, profit from operations decreased by EUR 1.2 billion year-on-year to EUR 1.5 billion, due to the same factors described under EBITDA for the 2017 financial year. 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

2018 First Quarter

In the first quarter of 2018, cash capex at our Group Development operating segment rose by 4.9 percent year-on-year due to ongoing investment in network capacity and quality at T-Mobile Netherlands.

2017 Financial Year

In 2017, 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.

Group Headquarters & Group Services

Group Headquarters & Group Services comprises all Group units that cannot be allocated directly to one of our five operating segments. For more information on our Group Headquarters & Group Services segment, see "*Description of our Business and Operations—Group Organization—Organization*".

Development of Operations

	Q1 2018	**Q1 2017**	**Change**	
	(millions of €)			**(%)**
	(unaudited)			
Total revenue	**651**	**735**	**(84)**	**(11.4)**
Profit (loss) from operations (EBIT)	(324)	(276)	(48)	(17.4)
Depreciation, amortization and impairment losses	(162)	(148)	(14)	(9.5)
EBITDA	(162)	(128)	(34)	(26.6)
Special factors affecting EBITDA[1]	(92)	(16)	(76)	n.a.
Adjusted EBITDA	**(70)**	**(113)**	**43**	**38.1**
Cash capex	**(248)**	**(242)**	**(6)**	**(2.5)**

n.a. – not applicable

1 For more information on special factors affecting EBITDA, see "*Development of Business in the Group—Results of Operations of the Group—Reconciliation of EBITDA and adjusted EBITDA*".

	2017	**2016[1]**	**Change**	
	(millions of €)			**(%)**
	(audited, except as otherwise indicated)		**(unaudited)**	
Total revenue	**2,943**	**3,467**	**(524)**	**(15.1)**
Loss from operations (EBIT)	(1,495)	(1,919)	424	22.1
Depreciation, amortization and impairment losses[2]	(657)	(676)	19	2.8
EBITDA[2]	(837)	(1,243)	406	32.7
Special factors affecting EBITDA[2, 3]	(121)	(574)	453	78.9
Adjusted EBITDA[2]	**(716)**	**(670)**	**(46)**	**(6.9)**
Cash capex	**(1,005)**	**(936)**	**(69)**	**(7.4)**

1 Adjusted to reflect changes in our reportable segments as of January 1, 2017. See "*Factors Affecting the Comparability of Results—Changes in Reportable Segments*".

2 Unaudited.

3 For more information on special factors affecting EBITDA, see "*Development of Business in the Group—Results of Operations of the Group—Reconciliation of EBITDA and adjusted EBITDA*".

	2016[1]	2015[1]	Change	
	(millions of €)			(%)
	(audited, except as otherwise indicated)		(unaudited)	
Total revenue	**2,212**	**2,275**	**(63)**	**(2.8)**
Loss from operations (EBIT)	1,001	(860)	1,861	n.a.
Depreciation, amortization and impairment losses	(521)	(627)	106	16.9
EBITDA[2]	1,522	(233)	1,755	n.a.
Special factors affecting EBITDA[2, 3]	2,098	319	1,779	n.a.
Adjusted EBITDA[2]	**(576)**	**(552)**	**(24)**	**(4.3)**
Cash capex	**(268)**	**(342)**	**74**	**21.6**

n.a. – not applicable

1 Reflects our reportable segments for the 2016 financial year (as reflected in our consolidated financial statements as of and for the year ended December 31, 2016). See "*Factors Affecting the Comparability of Results—Changes in Reportable Segments*".

2 Unaudited.

3 For more information on special factors affecting EBITDA, see "*Development of Business in the Group—Results of Operations of the Group—Reconciliation of EBITDA and adjusted EBITDA*".

Total Revenue

2018 First Quarter

Total revenue in our Group Headquarters & Group Services segment decreased by 11.4 percent year-on-year in the first quarter of 2018. 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, which was sold, effective as of June 2017, and lower revenue from land and buildings, essentially due to further optimization of the use of space.

2017 Financial Year

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).

2016 Financial Year

Total revenue in our Group Headquarters & Group Services segment in 2016 decreased by 2.8 percent year-on-year. This was mainly due to revenues lost as a result of the sale of our online platform t-online.de and our digital marketing company InteractiveMedia in November 2015, as well as the realignment of our Group Innovation+ unit. In addition, we continued to optimize the use of land and buildings, which resulted in a decline in intragroup revenue. By contrast, we recorded a revenue increase in connection with the structural further development of our Multi-Shared Service Center.

Adjusted EBITDA, EBITDA

2018 First Quarter

In the first quarter of 2018, adjusted EBITDA in the Group Headquarters & Group Services segment improved by EUR 43 million year-on-year, particularly as a result of higher income from the sale of real estate. The reduction in headcount brought about by ongoing restructuring of the Vivento workforce also had a positive effect. By contrast, lower revenue from land and buildings had a negative impact on adjusted EBITDA.

EBITDA was negatively affected by higher special factors – in particular staff-related measures – in the first quarter of 2018, which totaled EUR 92 million compared with EUR 16 million in the prior-year period.

2017 Financial Year

In 2017, adjusted EBITDA at Group Headquarters & Group Services decreased by EUR 46 million compared with 2016, 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.

2016 Financial Year

In 2016, adjusted EBITDA in our Group Headquarters & Group Services segment decreased by EUR 24 million year-on-year, mainly due to the non-recurrence of income of EUR 175 million recorded in the first quarter of 2015 resulting from an agreement to settle a complaints procedure under anti-trust law. Excluding this one-time effect, adjusted EBITDA was EUR 151 million higher compared with the prior year, primarily due to lower personnel costs as a result of the continued staff restructuring at Vivento, as well as lower operating expenses at our Group Services. The reversal of provisions, the realignment of our Group Innovation^{+} unit, and higher income from the real estate sales also had a positive effect. The following factors had a negative impact: lower revenues from land and buildings, reduced income from reimbursements in connection with the sale of our EE joint venture to the UK company BT in January 2016, and the loss of contributions as a result of the sale of t-online.de and InteractiveMedia.

Overall, positive special factors of EUR 2.1 billion affected EBITDA in 2016. These factors resulted primarily from the sale of our EE joint venture to the UK company BT, which was completed in January 2016. We generated income of EUR 2.5 billion from this sale. The sales of shares in Scout24 AG in April and December 2016 also generated income of EUR 0.1 billion. By contrast, EBITDA was negatively affected by expenses, especially for staff-related measures, of EUR 0.5 billion in 2016. In 2015, the special factors, which totaled EUR 0.3 billion, consisted primarily of income of EUR 0.3 billion from the sale of shares in connection with the IPO of Scout24 AG and income of EUR 0.3 billion from the sale of our online platform t-online.de and our digital marketing company InteractiveMedia, offset by a negative effect on EBITDA in 2015 from expenses of EUR 0.3 billion, especially for staff-related measures.

Profit (loss) from Operations

2018 First Quarter

In the first quarter of 2018, profit from operations decreased year-on-year by EUR 48 million, mainly due to the lower unadjusted EBITDA figure. Depreciation, amortization and impairment losses were EUR 14 million higher than the prior-year level, due in particular to higher depreciation and amortization caused by increased levels of capitalization at Deutsche Telekom IT. The latter were attributable to the fact that the costs of newly commissioned intragroup development services in Germany are no longer charged internally.

2017 Financial Year

The improvement in EBITDA in the 2017 financial year was the main cause of the year-on-year decrease of EUR 424 million in loss from operations in 2017, which amounted to a loss of EUR 1.5 billion. Depreciation, amortization and impairment losses were EUR 19 million lower 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.

2016 Financial Year

The increase of EUR 1.9 billion in profit from operations in 2016, which amounted to EUR 1.0 billion, compared with 2015 is primarily attributable to income from the disposal of our EE joint venture recorded in 2016. Depreciation, amortization and impairment losses were EUR 0.1 billion lower than the prior-year level, due in particular to lower depreciation and impairment losses on land and buildings as a result of our continued efforts to optimize our real estate portfolio.

Cash Capex

2018 First Quarter

In the first quarter of 2018, cash capex grew by EUR 6 million, or 2.5 percent, year-on-year. Higher capital expenditure on technology and innovation – essentially for development services – was partially offset by lower expenditure for the purchase of vehicles.

2017 Financial Year

In 2017, cash capex increased by EUR 69 million, or 7.4 percent, year-on-year, primarily owing to increased development activities in the Board department Technology and Innovation.

2016 Financial Year

In 2016, cash capex decreased year-on-year by EUR 74 million, or 21.6 percent, due to the purchase of fewer vehicles and licenses.

Outlook

Market Expectations

Germany

We expect the market for telecommunications services in Germany, which declined by 0.3 percent in 2017 compared with the prior year, 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 believe 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's 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

We expect the positive trend seen in the traditional communications markets in our Europe operating segment in 2017 to 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 Ltd., 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 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.

System Solutions

We expect the ICT market 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 are expected to continue to grow in the coming years.

- *IT services:* We anticipate that the clear growth in the market for IT services seen in the 2017 financial 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. We expect the high price and competitive pressure in the Dutch mobile market to 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). Furthermore, both the strong discount segment, comprising mobile providers' secondary brands, and MVNOs are expected to continue to generate lively competition.

With approximately 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.

Value Management and Performance Management System

In order to set and achieve our strategic goals more effectively, we pursue 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 table provides an overview of our key financial and non-financial performance indicators.

Financial performance indicators	For the year ended December 31,		
	2017	2016	2015
	(billions of €, except as otherwise indicated)		
	(audited, except as otherwise indicated)		
Net revenue	74.9	73.1	69.2
Profit (loss) from operations (EBIT)	9.4	9.2	7.0
Adjusted EBITDA[1]	22.2	21.4	19.9
Free cash flow (before dividend payments, spectrum investment)[1]	5.5	4.9	4.5
Cash capex[1, 2]	(12.1)	(11.0)	(10.8)
Rating (Standard & Poor's, Fitch)[1]	BBB+	BBB+	BBB+
Rating (Moody's)[1]	Baa1	Baa1	Baa1

1 Unaudited.
2 Excluding goodwill and spectrum investment.

See also "*Risk Factors—Risks Related to our Business—Our forecasts and forward-looking information may prove to be incorrect*".

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 our success. New products and services as well as additional sales activities are only successful if they increase revenue. For further information on the measures of financial performance which we use, see "*Special Note on Non-GAAP Financial Measures*".

Financial Flexibility

Our 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 2017 financial 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 believe that with a rating between A– and BBB (Standard & Poor's, Fitch) or between A3 and Baa2 (Moody's) we will be able to obtain required financing in the capital markets at reasonable terms.

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 our success. 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, as we believe that satisfied customers will act as multipliers for our success. As a responsible, service-oriented company, the needs and opinions of our customers are of great importance to us, and we want to retain our customers for the long term. For this reason we measure customer retention/satisfaction in our companies using the 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 was also used as a parameter in the long-term incentive plan, which was launched in 2015 and is offered to our managers (with the exception of the Management Board members). We take the TRI*M indices 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.

Expectations for the Group

We believe that our Group will continue to grow profitably in the next two years. Revenue and adjusted EBITDA are expected to rise at Group level in 2018. We believe that this is a good basis to achieve our financial ambitions by 2018, described in further detail under "*Description of our Business and Operations—Group Strategy*".

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

- We expect **revenue** to 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 is expected to 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.

- We expect **adjusted EBITDA** to increase in 2018 and to rise again 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 the sale of Strato AG 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.

- Our investments – in terms of **cash capex** (before spectrum investments) – are expected to increase slightly in 2018. Over the next two years, we want to continue investing heavily in building out our network infrastructure in Germany, the United States, and Europe in order to safeguard our position as a technology leader in the long term. Capital expenditure is expected to fall slightly year-on-year in 2019.

- Our **free cash flow** (before dividend payments and spectrum investment) is expected to increase in 2018 and rise sharply again in 2019. We believe that it will therefore make a crucial contribution toward keeping our relative debt – measured as the ratio of net debt to adjusted EBITDA – within our expectations in 2018 and 2019.

- As of the date of this offering memorandum, 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. Following the announcement of the business combination of T-Mobile US and Sprint on April 29, 2018, Standard & Poor's placed the Company's outlook on "CreditWatch Negative", stating that this placement indicates that a one-notch downgrade (*i.e.*, to BBB) is likely if the business combination closes in the absence of operating performance significantly ahead of its base case and other material leverage-reduction measures, and Moody's changed the Company's outlook from "stable" to "negative". The outlook from Fitch remained "stable". Maintaining a solid investment grade rating within the A– to BBB range should enable us to retain unrestricted access to the international financial markets and is thus a key component of our finance strategy.

Our expectations may change if the macroeconomic situation deteriorates and/or there is any unforeseen government or regulatory intervention. See "*Risk Factors—Risks Related to our Business—Recent moderate economic growth in Germany, Europe and the United States and uncertainties about prospects for growth going forward, including a potential slowdown in consumer spending, could adversely affect our customers' purchases of our products and services in each of our operating segments, which could have a negative impact on our operating results and financial condition.*", "*Risk Factors—Risks Related to our Business—Continued elevated levels of political uncertainty could have unpredictable consequences for the markets in which we operate and for the greater economy, potentially leading to declines in business levels and losses across our businesses*" and "*Risk Factors—Risks Related to our Business—We are subject to regulatory and legislative action by regulatory authorities, which may increase our costs of providing products or services, require us to change our business operations, products, or services or subject us to material adverse impacts if we fail to comply with such regulations.*".

Under our finance strategy, we plan to continue maintaining a liquidity reserve that, at any given time, covers the maturities of our capital market instruments over the next 24 months at a minimum.

Repayments of bonds and loans in the amount of EUR 2.8 billion and EUR 4.7 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 exact execution of further transactions depends on developments in the international capital markets. We also plan to cover part of our liquidity requirements by issuing commercial paper.

We intend to continue leveraging economies of scale and synergies in the future, through partnerships or appropriate acquisitions in our footprint markets. There are no plans 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.

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

REGULATION

Overview

Our operations worldwide, as well as those of our subsidiaries and affiliates, are subject to sector-specific telecommunications regulations and general competition law, as well as a variety of other regulations. The extent to which telecommunications regulations apply to us depends largely on the nature of our activities in a particular country, with the provision of traditional fixed-line telephony services usually being subject to the most extensive regulation. Regulations can have a very direct and material effect on our overall business, particularly in jurisdictions that favor regulatory intervention.

In recent years, as well as at present, the main areas of focus of regulatory intervention were:

- at the EU level, regulations, directives and other binding legislation, which, for example, regulate network access, traffic management and roaming;
- regulation of charges, such as monthly line rental for the unbundled local loop and termination rates;
- regulation of future wholesale broadband services and investments in new networks and infrastructure, including bitstream access and VDSL-Vectoring; and
- Regulation regarding network neutrality and roaming.

The EU Regulatory Framework for Electronic Communications

General

EU Member States are required to enact EU legislation in their domestic law and to take EU legislation into account when applying domestic law. In each EU Member State, an NRA is responsible for enforcing national telecommunications laws that are based on the EU Framework. The NRAs generally have significant powers under their relevant telecommunications laws, including the authority to impose obligations regarding network access and interconnection and regarding non-discrimination, including 'functional separation,' and to approve or review the charges and general business terms and conditions of providers with "significant market power" (see "—*Special Requirements Applicable to Providers with Significant Market Power*" below). The NRAs also have the authority to assign wireless spectrum (often in cooperation with the relevant national ministry or government department), to supervise the efficient use of frequencies and to impose universal service obligations.

Since much of our business is undertaken in the European Union, a significant portion of our operations is subject to the EU Framework and related telecommunications regulations.

The EU regulatory framework is largely determined by regulations to be applied directly in the EU Member States, by directives to be transposed into national law by the EU Member States and by recommendations of the European Commission that, while not binding, must be taken into account by the NRAs. As part of a strategy for the Digital Single Market (DSM), the European Commission announced regulatory initiatives in May 2015. These included, most notably, a complete review of the applicable EU legal framework for telecommunications. The process comprises a review of the current ex-ante regulation for network access, a reform of universal service regulation, as well as a renewed initiative to create a more harmonized framework for the allocation and assignment of mobile spectrum.

On September 14, 2016, the European Commission published two legislative proposals aiming at the revision of the existing EU Framework, for telecommunication; the European Electronic Communications Code (the 'Code') replacing the present EU Directives on telecommunication, and a revision of the Regulation on the European Group of Regulators, BEREC (the "BEREC regulation"). A provisional agreement on the two legislative proposals was reached on June 6, 2018 between the European Parliament and the European Council (EU co-legislators) (though the agreements are yet to be formally adopted by both the European Parliament and the European Council, this is expected to be reached by October 2018). Following its adoption and publication, Member States generally have twenty four months to transpose the Code into national law. The new BEREC regulation will be immediately applicable upon publication.

The BEREC regulation are not expected to have material direct effects on Deutsche Telekom AG. The results of the provisional agreement regarding the new Code present both upsides and downsides from our perspective.

In the field of spectrum, the Code includes more harmonized rules for spectrum allocation for the conditions that can be attached to spectrum auctions and for the setting of auction fees. This has the potential to increase legal certainty for our mobile operations. Specifically, a minimum license duration of fifteen years with a presumption of an extension for five years for spectrum for mobile broadband was agreed which can improve legal certainty with regard to spectrum use in some markets.

With respect to access regulation, the new rules carry forward many of the concepts of the present regulatory framework. Notably, detailed regulatory obligations can be imposed following the finding of significant market power in a relevant market. In addition, the rules will allow national regulatory authorities to impose access at reasonable terms on fixed network providers without significant market power in case high and non-transitory entry barriers require regulatory intervention. The European Commission and BEREC together can oppose such additional measures. The strengthening of regulators' powers to intervene without the determination of significant market power might on the one hand hold the risk of partially impeding potential deregulation of our fixed network but, on the other hand, provide the opportunity to facilitate access to networks of other parties in case we require such access.

For fiber networks reaching the home or building (or their immediate vicinity), the provisional agreement on the Code foresees a new regulatory regime in case an open co-investment offer is made and accepted by at least one market participant. Where such voluntary open access co-investment offers are conducive to sustainable competition on end-user markets and fulfill certain requirements, they can be made binding by the regulator, in principle blocking traditional access regulation to very-high-speed networks (subject to certain exemptions). 'Co-investment' also covers long-term purchase agreements if they convey structural rights to access seekers. We currently consider it too early to evaluate whether and to what extent our future network deployment will benefit from or be detrimentally impacted by the new regime. This will, among other things, depend on how the new concepts will be interpreted by national and EU regulators. The European Commission and BEREC can jointly veto national regulator's plans to accept co-investment commitments.

As regards service regulation, the provisional agreement on the Code contemplates a revised regulation of calls and SMS between users in different EU countries. As of May 15, 2019, prices for intra-EU communication services will be capped at 19 €ct per minute for calls and 6 €ct per SMS. We expect that the new rules, which might possibly be adopted in form of a directly applicable EU regulation, would allow operators the flexibility to offer alternative benefits to their customers instead of the regulated tariff. The new rules would not extend to business customers and will be limited in time for five years. We expect it to negatively affect service revenues, in particular in the European mobile market.

Regarding universal service obligations, no major changes to the present were proposed.

In the field of end-user rights, for the first time OTT services such as WhatsApp and Skype are in principle included in the legislation, contributing to the leveling of the playing field. However, numerous exemptions for such number-independent interpersonal communications services apply. A review will re-evaluate the need for further extension of certain obligations in the Code to these services. The provisional agreement stipulates certain additional obligations with respect to end-user rights, such as for service bundles, which would be fall into the new Code's scope of application in their entirety, even if only some elements of the bundle constitute an electronic communications service.

On November 25, 2015, the EU Parliament and the Council adopted Regulation (EU) 2015/2120 concerning the single market for electronic communications, which contains provisions on the open internet, access ("net neutrality") international roaming and end-user protection, including transparency obligations. Regulation (EU) 2015/2120 allows for the provision of "Specialised Services" with assured quality when objectively necessary, and Internet access services on a shared IP network. Equal treatment of all data traffic will be established as a principle, with the exception of reasonable traffic management being permitted in limited cases, if based not on commercial considerations, but on objectively different technical quality of service requirements of specific categories of traffic, *e.g.*, to prevent potential network overloads. Zero rating, *i.e.*, not charging for certain amounts of data traffic in connection with volume-based rate plans, remains permissible in principle; however, offers making such services available are subject to scrutiny by the NRAs (see "Mobile Regulation – Germany" below regarding StreamOn proceeding).

Regulation (EU) 2015/2120 further confers upon NRAs extensive powers to monitor and intervene, includes provisions on fines and stipulates requirements for the provision of information to consumers concerning an open internet and performance of the internet access service ("IAS"). The information to consumers on IAS performance, which must be published and included in individual contracts, includes, for example, the impact of specialized services on the IAS's performance, minimum and maximum available speed or the normally available speed of IAS. Any significant discrepancy between the contractual information and the individually measured actual performance may trigger remedies for consumers, depending on national provisions. On August 30, 2016, BEREC published Guidelines on the implementation of the net neutrality provisions. These Guidelines are designed to facilitate NRAs' tasks under Regulation 2015/2120 by providing a number of clarifications on the concrete application of its provisions. The Guidelines take a strict approach and their application by NRAs limits our ability to provide specialized services or new service offers over 5G networks.

With effect from June 15, 2017, surcharges for roaming services within the EU were eliminated entirely (commonly known as "Roam like at Home"), unless permitted under implementing rules on fair usage policy. The final act implementing fair usage rules, which was adopted on December 15, 2016, provides safeguards for operators, allowing them to detect and address potential abuses. For instance, a greater volume of roaming traffic than domestic traffic over the course of a four-month period may be an indicator of improper use, which ultimately may allow operators to apply a small roaming charge.

To support Roam Like At Home regulation, the EU has further decreased wholesale roaming charges with effect from June 15, 2017 – so called IOTs – which network operators charge to other network operators when their roaming customers use the other operator's network. The wholesale regulation adopted substantial cuts in the regulated wholesale roaming rates for data, as well as more moderate cuts for the prices of voice and SMS wholesale roaming services.

The introduction of Roam like at Home and a general reduction in regulated IOTs had a negative effect on our revenues and raised costs of domestic tariffs offered including roaming services. In addition, the introduction of Roam like at Home also gives rise to arbitrage risks – *i.e.*, risks from the misuse of the international roaming mechanism to circumvent national terms and conditions – for us and our international subsidiaries.

Special Requirements Applicable to Providers with Significant Market Power

The most significant regulatory impact on our business comes from the EU Framework's special requirements applicable to providers with significant market power, which is equivalent to the notion of dominance under EU competition law. As explained in the European Commission's guidelines on market analysis and the assessment of significant market power, single dominance concerns normally may arise in the case of undertakings with market shares of over 40% (40 – 50% if other factors indicate significant market power). Obligations in relation to network access, price setting, separate accounting for interconnection services, publication and non-discrimination, can be imposed on those operators that are designated by the relevant NRA as having significant market power in an electronic communications market. Such determinations are based on EU guidelines and EU competition case law. We have been designated as having significant market power primarily in most wholesale fixed-line markets in which we operate, as well as in mobile voice call termination markets.

In particular, an NRA may subject providers with significant market power, and their affiliates, to several rules and obligations specified within the EU Regulatory Framework and its directives and guidelines, such as:

- The obligation to offer other companies interconnection and unbundled network access as well as access to certain services and facilities on a non-discriminatory basis. This includes full unbundled access to copper-paired wire lines as well as bitstream access and access to other parts of the networks. In particular, unbundling has led to a considerable loss of our market share. For more information regarding the effects of unbundling obligations, see "*—German Fixed-Network Telecommunications Regulation—Local Loop Access*" below.

- Prior approval or retroactive review of charges, insofar as such charges and conditions relate to a market in which the provider holds significant market power.

- The obligation of transparency in relation to interconnection and/or access, requiring operators to make public specified information, such as accounting information, technical specifications, network characteristics, terms and conditions for supply and use, including any conditions limiting access to and/or use of services and applications.

- The obligation of non-discrimination in relation to interconnection and/or access. Obligations of non-discrimination require the operator to apply equivalent conditions in equivalent circumstances to other companies providing equivalent services and to provide services and information to others under the same conditions and of the same quality as it provides for its own services, or those of its subsidiaries or partners.

- The obligation to maintain separate accounting systems with regard to interconnection and access services. This obligation is intended to allow for transparency with respect to various telecommunications services in order to prevent, among other things, the cross-subsidization of services. In this regard, an NRA may specify the structure of a provider's internal accounting for particular telecommunications services, which can increase costs of compliance.

- The obligation on vertically integrated undertakings to place activities related to the wholesale provision of relevant access products in an independently operating business entity (functional separation). This is an exceptional measure to be employed if the NRA concludes that the respective obligations already imposed have failed to achieve effective competition and that there are important and ongoing competition problems and/or market failures identified in relation to the wholesale provision of certain access product markets.

Fixed and Mobile Termination Rate Recommendation

In October 2014 the European Commission revised the "Recommendation on relevant product and service markets", which, among other things, requires the NRAs to analyze the call termination markets to determine whether regulatory remedies are warranted. In 2009, the European Commission issued the Recommendation on the regulatory treatment of fixed and mobile termination rates in the EU (Recommendation 2009/396/EC, the "Recommendation") that defines details for the cost calculation of termination rates by the NRAs. With the Recommendation, the European Commission intended to harmonize cost standards for mobile termination rates throughout the EU. Although some NRAs did not follow the Recommendation, which is legally not binding, most European regulators applied the Recommendation, which is known as the "pure LRIC cost standard", and, in these markets, fixed and mobile termination rates therefore decreased significantly. In 2016, the European Commission conducted a public consultation regarding the Recommendation on the regulatory treatment of terminations rates which was intended, on the one hand, to examine the effects of the pure LRIC cost standard, and, on the other hand, to inquire into opportunities associated with pertinent future regulatory measures including a deregulation of the termination market by the European Commission. As a result of the consultation, the European Commission was granted the right to directly set a maximum cap for fixed and mobile termination rates which are binding for all companies offering termination of such calls.

German Fixed-Network Telecommunications Regulation

German telecommunications regulation has a particularly significant impact on our business due to the significant share of our operations that is based or conducted in Germany. German telecommunications regulation is based on the EU Framework, as in all EU Member States, and is mainly derived from the German Telecommunications Act (*Telekommunikationsgesetz*) and implemented by the Federal Network Agency (*Bundesnetzagentur*) as competent NRA.

We believe that, for the foreseeable future, the Federal Network Agency is likely to view us as a provider with significant market power in the fixed network and in other markets, including most of those in which we held monopoly rights in the past. Additionally, we have been determined to be a provider with significant market power in the German market for mobile voice call termination. There is a significant risk that the strict regulatory provisions of the German Telecommunications Act relating to providers deemed to have significant market power will continue to be applied in the future to our activities in the markets described above. Considering that in many markets our competitors are unlikely to gain significant market power in the near future, we expect that we will have to compete in important markets with providers not subject to those regulatory obligations. Therefore, these competitors may have more flexibility than we have in terms of the selection of services offered and customers served, pricing and the granting of network access.

Under the German Telecommunications Act, tariffs for telecommunications access services offered by providers with significant market power and their affiliates can be subject to price regulation, insofar as the tariffs relate to a market in which significant market power has been determined to exist. In particular, network access fees (in relation to both fixed-network and mobile networks) charged by providers with significant market power are subject to approval by the Federal Network Agency. Pursuant to the German Telecommunications Act, such approvals are subject to judicial review and can be appealed when deemed to be inadequately low by providers with significant market power, including, subject to certain restrictions, approvals with retroactive effect. In a decision dated November 22, 2016, the German Federal Constitutional Court (*Bundesverfassungsgericht*) found these restrictions to be partly unconstitutional and ordered the legislator to amend the German Telecommunications Act by July 31, 2018, resulting in a strengthened legal position for providers with significant market power. We expect a slight improvement for our position in court proceedings regarding our regulated wholesale charges. Other tariffs are essentially unregulated. The tariffs of all providers in Germany are, however, subject to generally applicable EU and German laws, including competition and consumer protection laws (see "—*Consumer Protection*" below).

In January 2010, the Federal Network Agency determined that we are a provider with significant market power for the access market. The agency included all-IP accesses to this market for the first time and imposed on us the obligation to periodically provide a resale offer on the terms of our retail tariffs for every type of access. In addition, the Federal Network Agency maintained ex-post controls on our offers. In August 2013, the Federal Network Agency released a regulatory order enabling for the first time Deutsche Telekom to introduce what is known as "VDSL-Vectoring" technology in areas not in proximity to local exchanges.

In October 2015, the Federal Network Agency released its final regulatory order regarding the broadband bitstream access market, reaffirming the obligation for Deutsche Telekom to offer to its competitors what is known as “bitstream access services” at different network layers (“Layer 2” and “Layer 3”). We expect the demand for such regulated access services to increase. See “*—Broadband Access – IP Bitstream*” below.

On September 1, 2016 the Federal Network Agency updated our obligations to provide local loop access, confirming the utilization of the VDSL-Vectoring technology for areas not in proximity to local exchanges but also — as a new element — for areas that are in proximity to local exchanges. See “*—Local Loop Access*” below.

According to provisional tariff decisions of the Federal Network Agency in the fourth quarter of 2016, fixed termination rates were reduced by 58%, effective as of January 1, 2017 for fixed termination rates. The steep decrease is due to the application of a new costing method (known as “pure-LRIC”) which was recommended by the European Commission. The final approval confirmed the tariff level of the preliminary ruling. (See also “*—Mobile Regulation—Germany*” below.)

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 with a view to rates regulation. All market players were asked to respond to the consultation paper. The seventeen 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.

Besides that, in May 2017 BNetzA started a Market Analysis Review for the main Wholesale Access markets (Local Loop/VULA and Bitstream) before the end of the regular three-year review term. One important factor was the current discussion about an investment-friendly framework for FTTH/B-rollouts. Jochen Homann has indicated at several occasions, that the current regulatory framework, especially the strict ex-ante price control should be changed, enabling more flexibility and de-regulation, if open access and co-operation are provided.

Local Loop Access

We have been offering unbundled local loop (“ULL”) access since 1998. We are obliged to publish a reference offer for access to the ULL and prices require ex-ante approval. By allowing competitors to connect to customer access lines within our local networks, unbundling of the local loop allows our competitors to gain direct access to customers without having to build local networks of their own. This allows competitors to use our customer access lines to offer a wide range of local services directly to customers.

In August 2013, the Federal Network Agency released a regulatory order authorizing for the first time Deutsche Telekom to introduce “VDSL-Vectoring” technology to areas not in proximity to its local exchanges, substantially increasing the potential bandwidth Deutsche Telekom can offer to its retail customers in areas where the technology is applied. The individual bandwidth available depends on local technical conditions. Wholesale customers benefit from the bandwidth increases via regulated broadband wholesale products, *e.g.*, bitstream access products or an additional wholesale product offered at the level of the serving area interfaces within the access network (known as the “KVz alternative product”). Alternatively, competitors can invest in the vectoring technology themselves. However, only one provider is entitled to utilize the vectoring technology within the area served by a given distribution point, and whether this is Deutsche Telekom or one of its competitors, depends on a complex set of rulings and conditions including the “first come first served” principle. Since November 1, 2016, Deutsche Telekom has also been obligated to offer a Layer 2 bitstream access (BSA) product (see “—*Broadband Access – IP Bitstream*” below). As of December 1, 2017 the Federal Network Agency provisionally approved 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.

On September 1, 2016, the Federal Network Agency issued the final regulatory order for the ULL market after the required consultation with the European Commission. The obligation to provide access to the cable duct between the main distribution frame and the multi-functional street cabinet remains in force. The Federal Network Agency also maintained an obligation to provide access to dark fiber for the section between the main distribution frame and the multi-functional street cabinet. However, this access obligation only applies in the event that no cable duct capacity is available. An exception has been imposed for the implementation of vectoring within areas in proximity to a local exchange. In that case, competitors may choose between renting cable ducts or having access to dark fiber. This obligation is limited for two years after the street cabinet has been made accessible for the operator seeking access. The Federal Network Agency has maintained applicable regulations to new fiber-optic ULLs. Under this regime, rates have to be reviewed by the Federal Network Agency prior to market launch and then remain subject to ex-post control, with the agency being permitted to initiate proceedings at any time on the basis of complaints raised by competitors.

The Federal Network Agency reviewed the specific conditions required for nearshore vectoring by way of a reference offer procedure and announced its decision in its official journal on August 9, 2017. The deadlines for the three planned nearshore build-out tranches have thus now been set. While Telekom has to expand a total of about 95% of the near-shore areas by February 9, 2020, the complete expansion of competitors must take place by February 9, 2019. Deutsche Telekom need only have completed 20% by February 9, 2019 and a further 20% by November 9, 2019. 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 decision for this process which in essence permitted the roll-out of nearshore vectoring was also announced on August 9, 2017.

Broadband Access – IP Bitstream

Since 2015 we have been required to offer Layer 2 and Layer 3 wholesale bitstream access products. The rates in the standard offering for the layer 3 product are subject to ex-post control by the Federal Network Agency. The rates of the Layer 2 bitstream access product are subject to ex-ante control, but without cost-oriented price control.

In June 2016 the Federal Network Agency issued a provisional ruling on our new offer for the Layer 2 access products, reducing the rates we proposed; we have been offering Layer 2 wholesale bitstream access products under these provisional rates since November 1, 2016. The final ruling entered into effect on December 9, 2016, following the required consultation with the European Commission. The bitstream access regulation continues to have a negative impact on our revenue generation.

On September 21, 2017, we again made an application to the Federal Network Agency regarding our Layer 2 rates requesting an increase in the monthly rate as part of contingent models. In its final decision on March 8, 2018, the Federal Network Agency confirmed its preliminary decision from December 2017 and approved the majority of rates at the current levels.

Mobile Regulation

Germany

In June 2015, TDG purchased spectrum through auction in the 700 MHz, 900 MHz, 1.5 GHz and 1.8 GHz frequency ranges. TDG received the assignment notices from the Federal Network Agency for 1.8 GHz in June 2016 and for 900 MHz in July 2016, respectively. We expect to receive the assignment notices for 700 MHz and 1.5 GHz following an application from TDG in advance of the planned commencement of usage.

The coverage requirements stipulate that any successful bidder is obliged to offer an area-wide broadband coverage of at least 50 MBit/s (megabit per second) downlink at the antenna. Within three years after the assignment of the frequencies each holder of a frequency needs to cover at least 98% of all households nationwide and at least 97% of all households per federal state providing the performance mentioned above. For the main traffic routes (state highways and ICE rail tracks) area-wide coverage is obligatory (subject to legal and factual restrictions).

On May 14, 2018, Federal Network Agency published the decision to auction 2x60 MHz in the 2,1 GHz and additional 1x300 MHz in the 3,6 GHz band (3,4-3,7 GHz). The draft planning for the spectrum sale foresees that the frequency range 3,7-3,8 GHz will be assigned for local/regional usage application based. A finalization of the conditions for the spectrum usage and auction rules are expected after a consultation planned for end of September 2018. The application phase and bidding procedure would follow then in H1/2019.

According to the provisional tariff decisions of the Federal Network Agency mentioned under "—*German Fixed-Network Telecommunications Regulation*" above, mobile termination rates were reduced by more than 30% as of December 1, 2016.

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 (EU) 2015/2120 on net neutrality and roaming. The ruling stipulates that 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. However, we believe that the design of our service complies with EU law. As such, we have filed an appeal against the ruling and are seeking legal remedy with the Cologne Administrative Court. We are legally entitled and continue to offer StreamOn in unchanged form during the summary proceedings.

Europe

Since mid-2017, we were involved via several of our subsidiaries in national spectrum assignment procedures, license prolongations and the acquisition of mobile spectrum on bilateral base (spectrum trading). The latter was the case in Albania where third mobile operator PLUS decided to leave the market at the end of 2017. Our subsidiary Telekom Albania acquired around 2x4 MHz in the 900 MHz band, 2x4.5 MHz in the 1800 MHz band and 2x5 MHz in the 2100 MHz band from that company. On May 31, 2017, Slovak Telekom participated in the sale of 3.7 GHz spectrum for regional usage in Slovakia and ensured 40 MHz in the Bratislava region for having capacity for 5G applications at a later stage. In addition to these two cases, our OTE subsidiary Cosmote was able to renew and double its 26 GHz spectrum in 2017 in Greece. Later in autumn 2017, Cosmote successfully participated in a national spectrum renewal procedure (auction) and ensured another fifteen year license period for its existing 2x25 MHz in the 1800 MHz band. Finally, Cosmote was granted permission to keep its expiring usage right in the 410 MHz band for a further three years.

In 2018 and 2019, the NRAs of several European countries in which we are active via our subsidiaries including Albania, Austria, Croatia, Hungary and the Netherlands, plan to sell mobile spectrum. This is especially relevant with regard to the sale of new bands (700 and 800 MHz, 3.6 GHz and 26 GHz) and the reallocation of expiring spectrum licenses in the 900, 1800 and 2100 MHz bands.

United States

Our U.S. mobile operations, conducted through our majority owned subsidiary T-Mobile US are regulated by the FCC and by various other federal, state and local governmental authorities. Wireless communications providers must be licensed by the FCC to provide communications services at specified spectrum frequencies within specified geographic areas and must comply with the rules and policies governing the use of the spectrum as adopted by the FCC. The FCC issues each license for a fixed period of time, typically ten years in the case of cellular, PCS and point-to-point microwave licenses. For Advanced Wireless Services (“AWS”) licenses, AWS-1 licenses issued on or before December 31, 2009, have an initial term of fifteen years, while licenses issued after this date, as well as renewals, have ten-year terms, and AWS-3 licenses have an initial term of twelve years and ten years for subsequent terms. 600 MHz licenses have an initial term of twelve years, with an expectation of renewal for ten years for subsequent terms. While the FCC has generally renewed licenses given to operating companies like T-Mobile US, the FCC has authority to both revoke a license for cause and to deny a license renewal if a renewal is not in the public interest. Furthermore, T-Mobile US could be subject to fines, forfeitures and other penalties for failure to comply with FCC regulations, even if any such non-compliance was unintentional. In extreme cases, penalties could include the revocation of T-Mobile US’ licenses. The loss of any licenses, or any related fines or forfeitures, could adversely affect T-Mobile US’ business, results of operations and financial condition.

Additionally, the U.S. Congress’ and the FCC’s allocation of additional spectrum for broadband commercial mobile radio service (“CMRS”), which includes cellular, PCS and specialized mobile radio, could significantly increase competition. We cannot assess the impact that any developments that may occur in the U.S. economy or any future spectrum allocations by the FCC may have on license values. FCC spectrum auctions and other market developments may adversely affect the market value of T-Mobile US’ licenses in the future. A significant decline in the value of these licenses could adversely affect the company’s financial condition and results of operations. In addition, the FCC periodically reviews its policies on how to evaluate a carrier’s spectrum holdings. A change in these policies could affect spectrum resources and competition among T-Mobile US and other carriers.

The U.S. Congress and the FCC have imposed limitations on foreign ownership of CMRS licensees that exceed 20% direct ownership or 25% indirect ownership. The FCC has ruled that higher levels of indirect foreign ownership, even up to 100%, are presumptively consistent with the public interest albeit subject to review. Consistent with that established policy, the FCC has issued a declaratory ruling authorizing up to 100% ownership of T-Mobile US by Deutsche Telekom. This declaratory ruling and T-Mobile US’ licenses are conditioned on Deutsche Telekom’s and T-Mobile US’ compliance with a network security agreement with the Department of Justice, the Federal Bureau of Investigation and the Department of Homeland Security. Failure to comply with the terms of this agreement could result in fines, injunctions and other penalties, including potential revocation of T-Mobile US’ spectrum licenses.

Only the FCC has authority to regulate “rates and entry” by CMRS operators, while both the individual states of the United States and the FCC have authority to regulate “other terms and conditions” of CMRS. The FCC has refrained from regulating rates charged by CMRS operators. However, under its authority to license CMRS operators to serve the public, the FCC has imposed a number of requirements on operators, including, for example, rules regarding the provision of 911 and E-911 services, porting telephone numbers, interconnection, roaming, internet openness or net neutrality and the universal service and Lifeline programs. Many of these and other issues are being considered in ongoing FCC proceedings, and we cannot predict whether or how such actions will affect T-Mobile-US’ business, financial condition or results of operations. Our ability to provide services and generate revenues could be harmed by adverse regulatory action or changes to existing laws and regulation. In addition, regulation of companies that offer competing services can impact T-Mobile-US' business indirectly.

Other current U.S. regulatory issues that may significantly impact T-Mobile US' business include:

- *Open Internet/Net Neutrality* ("NN"): Following the issuance of detailed net neutrality rules in 2015, the FCC reversed itself in December 2017and adopted new, deregulatory rules. The goal is to return to a light-touch regulatory framework that promotes investment and "innovation both within networks and at their edge." The core elements of the revision are:

  - **Reclassification**: The "Restoring Internet Freedom Order" ("RIFO") reclassified Broadband Internet Access Service ("BIAS") as a largely unregulated "Information Service" rather than a "Telecommunications Service", returning the classification which was in place prior to the Obama-era FCC's 2015 Open Internet Order.

  - **Removal NN rules**: The reclassification provided the legal footing to remove the bright line net neutrality principles (no blocking, no throttling, no paid prioritization). Privacy and data security guidelines promulgated in 2015 had previously been invalidated by Congress.

  - **Paid prioritization**: This is now permitted to "increase network innovation." Any paid prioritization arrangements will have to be disclosed to allow for potentially harmful practices to be addressed.

  - **Preempt of state or local requirements**: New rules no pre-empt any state or other local requirements which are inconsistent with the FCC's deregulatory approach. This preemption will likely be tested in court. Several states have already moved to pass NN legislation or add NN requirements to public procurement contracts. The risk for investors is that state legislation or procurement provisions prevail in court, leading to a patchwork of compliance obligations.

  - **Internet Traffic Exchange Agreements:** These agreements will return to a free-market negotiation approach. Previously, such agreements were subject to case-by-case enforcement against "unjust" or "unreasonable" practices.

  - **Transparency**: BIAS providers are now subject only to a transparency requirement. This includes disclosure of network management practices, commercial terms of service, incl. price, privacy policies and redress options.

  - **Enforcement**: Enforcement in the Internet space will be turned over to the Federal Trade Commission (FTC) and will be ex post.

  The rules will take effect from June 11, 2018. The rollback of the net neutrality and privacy rules eliminates some operational uncertainty and preserves potential future business opportunities. However, over twenty US states, tech firm associations and NN supporters are suing in court (court schedule for this proceeding not yet issued). The court battle will take several months and will thus present some level of investor uncertainty.

- *Spectrum:* T-Mobile US spent $8 billion in the FCC's Broadcast Incentive Auction of the 600 MHz band, acquiring 1,525 total 10-megahertz licenses which cover 414 of the auction's 428 partial economic areas, making T-Mobile US the biggest winning bidder by a significant margin. Across the country, T-Mobile US is aggressively deploying in the 600 band, which will be foundational to T-Mobile US's 5G network. Mobile 5G services will also benefit from the millimeter wave (mmW) bands, which offer high capacity, but are limited in range and penetration. The FCC will begin mmW auctions on November 14, 2018, starting with the 28 GHz band, then auctioning the 24 GHz band after the 28 GHz auction concludes. The FCC is also considering rules for how to allocate various other high spectrum bands, such as the 26 GHz, 37/39 GHz, 47 GHz bands. Mid-band spectrum (generally between 1 and 6 GHz) is also crucial, and the FCC is in the process of considering rules in those bands, as well

- *Special Access:* On November 17, 2016, after the results of the 2016 presidential election, the then Democratic led FCC withdrew a proposal that aimed to implement a technology neutral regulatory framework for business data services ("BDS") to maintain price cap constraints where necessary and update the Competitive Market Test used to determine where, and to what extent, pricing caps should be used. In April 2017, in one of the Republican led FCC's first significant deregulatory initiatives, the FCC eased the pricing rules in the BDS market, claiming strong competition across the BDS market, and establishing a new technology specific competitive market test to determine which areas and services are in need of rate regulation.

- *T-Mobile US / Sprint Transaction*: T-Mobile US and Sprint Corporation on April 29, 2018 announced their intent to merge in an all-stock transaction at a fixed exchange ratio of 0.10256 T-Mobile shares for each Sprint share or the equivalent of 9.75 Sprint shares for each T-Mobile US share. In order to close, the transaction faces regulatory reviews at the Department of Justice (antitrust review), the FCC (public interest review), the Committee on Foreign Investment in the United States, or "CFIUS" (national security review), and on the state level. The regulatory reviews are expected to take at least a year from announcement to complete.

While the Communications Act generally preempts state and local governments from regulating the entry of, or the rates charged by, wireless communication providers, certain state and local governments regulate other terms and conditions of wireless service, including billing, termination of service arrangements and the imposition of early termination fees, advertising, network outages, the use of handsets while driving, zoning and land use. Further, the FCC and the Federal Aviation Administration regulate the siting, lighting and construction of transmitter towers and antennas. Tower siting and construction are also subject to state and local zoning, as well as federal statutes regarding environmental and historic preservation. The future costs to comply with all relevant regulations are to some extent unknown and regulatory changes could result in higher operating expenses for T-Mobile US in the future.

Telecommunications Regulation for other subsidiaries of Deutsche Telekom in Europe

Our subsidiaries with fixed and/or mobile networks in Greece, Hungary, Romania, Slovakia and Croatia, Poland, Czech Republic, Netherlands and Austria are subject to the same EU Regulatory Framework as our fixed-line business upon which the German regulation regime is based. We also operate fixed and mobile networks in the F.Y.R. Macedonia and in Montenegro and a mobile network in Albania. These countries' regulatory frameworks are converging towards the EU Framework. Therefore, all of our subsidiaries in Europe are generally exposed to a set of regulatory rules akin to those in Germany described above. While our fixed networks in Greece, Hungary, Slovakia, Croatia, Macedonia, Montenegro and partly Romania as former incumbent network operators are subject to network access regulation for the benefit of competitors, our operators in Poland, the Czech Republic, the Netherlands, Austria and Albania may profit from such obligations imposed upon their local formerly incumbent fixed network operators.

Consumer Protection

Deutsche Telekom, as a telecommunications services provider, is subject to a variety of rules and regulations aimed at customer and consumer protection.

Regulation published by Federal Network Agency

In September 2015, the Federal Network Agency launched a system that enables consumers to measure the bandwidths available on their fixed-network and mobile lines. In relation to the Telecoms Single Market Regulation the Federal Network Agency published a public consultation to determine whether the measured speed levels correspond with the contractually agreed speed levels. A report on the bandwidths available throughout Germany was published in June 2016 and a second report in January 2018. The Federal Network Agency found that measured speeds increased but the ratio between the measured and the contractual agreed maximum speed decreased between these two reports. The results of the public consultation could prompt new legislation regarding the contractual requirements such as new obligations for minimum service quality levels.

In December 2016, the German parliament consented to a regulation designed to increase transparency and enhance cost control in telecommunications services. This regulation became effective on June 1, 2017, while for certain rules an extended transposition period of twelve months applies. This regulation requires Deutsche Telekom to include with monthly bills, contract summaries including information about speed and data volume and detailed information about termination periods.

Additionally, the Germany the Federal Ministry for Justice and Consumer protection presented a draft declaration (*Musterfeststellungsklage*) which would enable consumers to collectively redress interests. This may increase the occurrence of legal actions brought by entitled parties including consumer protection agencies.

Dutch Supreme Court decision regarding the combined sales of mobile contracts and devices

In a case not involving Deutsche Telekom and in response to a prejudicial question raised in relation to a bad debt collection case the Dutch Supreme Court (Hoge Raad der Nederlanden) found on February 12, 2016 that mobile contracts that are sold in combination with a free or discounted device to the effect that the price of the device as such is not apparent for the customer are to be treated as consumer credit or installment purchase contracts. As a consequence, such contracts are subject to certain consumer protection provisions under Dutch law, and contracts that do not comply with these provisions can be rescinded by the consumer. Following an effective rescission the customer is entitled to be compensated for the amount he paid for the handset. This legal qualification applied in the decision by the Dutch Supreme Court has been confirmed in multiple cases initiated by individual customers. *Consumentenclaim* – a commercial mass claim organization – has joined forces with the Dutch Consumer Union to seek compensation the mobile operators on behalf of customers from to compensate for these contracts. In 2013, – prior to the Supreme Court decision – T-Mobile Netherlands began phasing in the handset pricing in its contract.

Data Protection

The European General Data Protection Regulation (Regulation (EU) 2016/679) (the "GDPR") entered into force on May 25, 2018. These new data protection laws close a gap in the regulation of service providers outside of the EU and generally impose uniform rules for all market participants operating within the EU. Regulation (EU) 2016/679 is designed to ensure a high level of data protection in Europe and, at the same time, to level the playing field for new digital business models. Regulation (EU) 2016/679 will apply directly in the EU Member States and does not need to be transposed into national law. In order to preserve the level playing field created by Regulation (EU) 2016/679, it is important that the EU Member States do not make excessive use of the freedom granted to them by the Regulation to implement additional dedicated provisions at national level; instead, they should do so only where absolutely necessary. In Germany, in the revised version of the Federal Data Protection Act which has come into force on May 25, 2018, German legislators have responded to some of the criticism leveled at their initial drafts and have reduced the number of special provisions for the non-public sector. To mitigate the risks of high sanctions, Deutsche Telekom started a GDPR implementation project in 2016 which were successfully implemented by May 2018. The implementation will now be reviewed by Group privacy and Group Audit.

In addition, telecommunications providers are subject to strict sector-specific rules under the e-Privacy Directive (Directive 2002/58/EC). The directive, which has been in place since 2002, is currently being revised at EU level with the objective to extend its scope beyond telecommunications providers to over-the-top service providers in order to create a level playing field in communications. Until the e-Privacy Directive has been revised, data stored by telecommunications providers will remain subject to stricter, dedicated rules. Telecommunications providers in Europe thus still have a competitive disadvantage in some areas – one that the new e-Privacy Regulation as a follow-up instrument will likely only partially alleviate. For example, data processing options for telecommunications providers are substantially restricted compared to what would be permissible under Regulation (EU) 2016/679, making it less likely 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 as a general rule, it will only be possible to process metadata either with customer approval or anonymized. This continues the strict regulatory regime of the current e-Privacy Directive. The GDPR in contrast, provides compliant options for processing such data that do not require customer consent by using pseudonyms. Unless the upcoming e-Privacy Regulation will include similar options as the GDPR, various service models that may be useful to consumers might be ruled out, such as services for finding parking spaces, avoiding accidents, and tele-monitoring services in the healthcare field.

Following the judgment of the European Court of Justice ("ECJ") dated October 6, 2015, holding the European Commission's Safe Harbor Decision ("Safe Harbor") to be invalid, the European Commission put forward a successor agreement (known as the EU-U.S. Privacy Shield – "Privacy Shield") at the beginning of February 2016. As in the case of the former Safe Harbor Agreement, the Privacy Shield is intended to enable personal data of EU citizens to be transmitted to and be processed in the United States. The final draft of the Privacy Shield, which was adopted by the European Commission on July 11, 2016 following a majority vote of the EU Member States, includes privacy principles which stipulate heightened data protection requirements compared to Safe Harbor, with which U.S. companies must comply if they want to be certified under the Privacy Shield. Following criticism of the first draft of the Privacy Shield, the European Commission has, in a revised draft, sought to assuage the concerns expressed recently by the Article 29 Working Party, in particular, which is comprised of representatives from national data protection authorities in Europe. It cannot be ruled out that the Privacy Shield will be referred to the ECJ again, in particular with regard to the legality of the large-scale recording of personal data by national U.S. authorities that remains permissible under the Privacy Shield.

IT Security

On May 3, 2016, a new ordinance (*Bestimmung Kritischer Infrastrukturen-Verordnung*, "KRITIS-VO") under the German IT Security Act (*IT-Sicherheitsgesetz*, "*IT-SiG*") entered into force, which sets out the criteria that enable operators of critical infrastructure in the information technology and telecommunications, water, energy and food sectors to identify whether they are subject to the provisions of the IT-SiG. As a result, the provisions of the German Telecommunications Act (*Telekommunikationsgesetz*) applicable to the telecommunications sector has become more stringent, in particular with regard to the reliability of networks and services in accordance with current technological developments. We had already made the necessary adjustments even before the German IT Security Act was amended, and we therefore believe that we satisfy the main obligations for safeguarding public security as required by German law.

The European Parliament approved the EU Network and Information Security Directive on July 6, 2016 ("IT Security Directive"), based on which online marketplaces, search engine operators and cloud service providers will also have to ensure compliance with minimum requirements for the security of their infrastructure and report incidents. The IT Security Directive must be implemented by the national legislatures of the EU Member States. As the obligations set forth in the IT Security Directive go beyond what is entailed in the IT-SiG, a new law implementing the European Network Security and Information Security Directive was announced on June 29, 2017 and complements the IT-SiG.

Potential Regulatory Changes

The Federal Network Agency has announced plans to deregulate Deutsche Telekom's product bundles for retail customers. However, it is not seeking to lift the regulation entirely as retail regulation will remain for telephone lines without broadband included in product bundles (Deutsche Telekom still has customers on such lines and according to BNetzA, DT has still SMP for those lines). The Federal Network Agency is currently conducting a market analysis to review the situation. If the current draft decision enters into force as is, the Federal Network Agency will be deregulating the "double play and bundles with even more components" sub-market, while single-play products and "old" lines without call rates or broadband will continue to be regulated for Deutsche Telekom products. We expect a decision on the planned deregulation by mid-2018. At the same time, we expect a decision on how to regulate the single play and "old" lines. The regulation of wholesale products will remain unaffected.

LEGAL PROCEEDINGS

The companies in our Group are involved in a number of legal proceedings in the ordinary course of our business. In addition, proceedings involving alleged abuse of a market-dominant position by us and other alleged antitrust violations, as well as other regulatory controversies, are pending before competition and regulatory authorities.

Securities and Corporate Law-Related Proceedings

Toll Collect Arbitration

The Toll Collect consortium was formed to establish and operate a toll collection system for select vehicle categories on German highways. It was organized in the consortium company Toll Collect GmbH, with Daimler Financial Services AG and Deutsche Telekom as principal members. By a statement of claims served on us on August 2, 2005, the Federal Republic of Germany initiated arbitration proceedings against Daimler Financial Services AG, Deutsche Telekom and the consortium as joint and several debtors for damages allegedly suffered as a result of both the delay in the commencement of operations and alleged breaches of the related operating agreement and other violations. In this statement, the Federal Republic of Germany claimed to have lost toll revenues of approximately EUR 3.51 billion plus interest due to the delay and demanded an additional EUR 1.65 billion plus interest for alleged breaches of the operating agreement and other alleged violations. In a letter dated May 16, 2008, the Federal Republic of Germany recalculated its claim for damages for lost toll revenues and reduced it by EUR 169 million to approximately EUR 3.33 billion plus interest.

In addition, in December 2006, Toll Collect GmbH initiated an arbitration proceeding seeking a determination that the Federal Republic of Germany's basis for denying the issuance of the final operating permit was unfounded and claiming that additional remuneration was due to Toll Collect GmbH under the operating agreement. The statement of claims of Toll Collect GmbH was served on the Federal Republic of Germany on May 25, 2007. The Federal Republic Germany's statement of defense, including a counterclaim re-claiming overpayment of remuneration to Toll Collect GmbH, was received on January 31, 2008.

Following exchanges of briefs, hearings in relation to the claims initiated by the Federal Republic of Germany took place in the spring and fall of 2014, June 2015, June 2016 and 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.

In relation to claims initiated by Toll Collect GmbH, hearings took place in January and June 2016. In May 2016, Toll Collect GmbH extended its claim to an amount of EUR 1.64 billion plus interest to encompass the remuneration outstanding for 2014–2015.

As the arbitral tribunal had not been able to reach a decision in 14 years and a decision was not expected in the foreseeable future, board members of Daimler and Deutsche Telekom and representatives of the Federal Ministry of Transport and Digital Infrastructure) entered into intensive negotiations aiming at a settlement. On 16 May 2018, the parties reached an agreement to end both arbitration proceedings. The settlement amount totals around EUR 3.2 billion. It takes previous payments to the Federal Republic into account and includes a one-time final payment of EUR 550 million by each of the principal shareholders (Deutsche Telekom and Daimler). The settlement provides legal certainty for both the involved companies and the German government.

German prospectus liability suits

Since 2001, around 16,000 purported purchasers of our shares sold pursuant to prospectuses dated May 26, 2000 (third public offering, or "DT3"), have filed more than 2,600 lawsuits in Germany predominantly alleging that the book values of our real property portfolio were improperly established and maintained under German GAAP and that we allegedly failed to adequately disclose detailed information relating to merger negotiations between us and VoiceStream Wireless Corporation (the predecessor of T-Mobile US). 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. These lawsuits are currently pending before the Regional Court (*Landgericht*) in Frankfurt am Main. The aggregate amount of all shareholders' claims filed in Germany in these lawsuits is approximately EUR 80 million plus interest.

On May 16, 2012, the Frankfurt am Main Higher Regional Court (*Oberlandesgericht*) issued its decisions in the model proceedings (*Musterentscheid*) regarding the DT3 offering , holding that, the prospectus did not contain any material errors. Upon appeal, the Federal Court of Justice (*Bundesgerichtshof*), in its decision of October 21, 2014, overruled the Higher Regional Court's decision on the DT3 prospectus holding that the prospectus contained a material error, and remanded the case to the Higher Regional Court. The Federal Court of Justice did not address the question of liability of Deutsche Telekom for damages. On remand, the Higher Regional Court held on November 30, 2016 that Deutsche Telekom could in principle be held liable for damages caused by the error in the prospectus. However, it also held that whether Deutsche Telekom was ultimately liable for damages of the individual claimants would have to be decided on a case-by-case basis by the competent courts. Both Deutsche Telekom and the individual plaintiff of the model proceedings have filed appeals against the decision of the Higher Regional Court. Deutsche Telekom continues to hold the opinion that there are compelling arguments that Deutsche Telekom should not be held liable for damages

General Commercial Disputes

Claims of partnering publishers of telephone directories

At the end of 2013, several publishers that had set up joint ventures with the then DeTeMedien GmbH, formerly a wholly owned subsidiary of Deutsche Telekom, and now named Deutsche Tele Medien GmbH, to edit and publish subscriber directories, filed claims in civil courts against DeTeMedien GmbH and/or Deutsche Telekom. The plaintiffs are claiming damages or refunds from Deutsche Tele Medien GmbH and, to a certain extent, from Deutsche Telekom as joint and several debtor alongside Deutsche Tele Medien GmbH totaling around EUR 470 million plus interest at the end of 2014. The plaintiffs base their claims on allegedly excessive charges for the provision of subscriber data in the joint ventures. On October 22, 2015, Deutsche Telekom, Deutsche Tele Medien GmbH and the majority of the partnering publishers entered into a settlement agreement. As a result, 54 publishers waived their claims and seven publishers withdrew their appeals resulting in the rulings of the first instance that had rejected the claims becoming legally binding. At present, 13 lawsuits are still pending with a remaining total amount in dispute of approximately 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. In addition, five partnering publishers of telephone directories, 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. Three 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 ("KDG") — now Vodafone Kabel Deutschland GmbH — filed a claim against Telekom Deutschland GmbH to reduce the annual charge for the rights to use cable duct capacities in the future and to gain a partial refund in relation to overpayments made since 2004. According to Vodafone Kabel Deutschland GmbH's latest estimates, its claims amount to around EUR 540 million plus EUR 11 million for the alleged benefit from additional interest received, plus interest in each case. Claims prior to 2009 are no longer being asserted by Vodafone Kabel Deutschland GmbH. After the Frankfurt/Main Regional Court dismissed the claim in 2013, the Frankfurt/Main Higher Regional Court also rejected the appeal on December 9, 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 filed a claim on January 23, 2013 demanding that Telekom Deutschland GmbH cease charging the plaintiffs more than a specific and precisely stated amount for the shared use of cable ducts. The claim further sought 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 appealed this decision which was rejected by the Düsseldorf Higher Regional Court in its ruling of March 14, 2018. A further appeal was not allowed. As of the date of this offering memorandum, this decision is not final and binding. The plaintiffs have lodged an appeal with the Federal Court of Justice against the non-allowance to appeal the decision.

Claim for damages in Malaysia

Malaysian communications providers Celcom Malaysia Berhad ("Celcom") and Technology Resources Industries Berhad ("TRI"), have brought actions against eleven defendants in total, including DeTeAsia Holding GmbH ("DTAH"), a subsidiary of Deutsche Telekom, and certain (former) directors before the High Court in Kuala Lumpur, Malaysia. The plaintiffs are seeking damages of USD 232 million plus interest. DTAH had recovered this amount from Celcom in 2005 following, and on the basis of, an award granted by the ICC arbitral tribunal in DTAH's favor. Celcom in particular accuses its former directors (including delegated German directors and employees of DTAH or Deutsche Telekom) of breach of fiduciary duties and is claiming compensation in the very amount Celcom was ordered to pay, and indeed paid, under the ICC award. The main proceedings in the court of first instance began in January 2018.

Disputes in Relation to Radio Frequency Emissions

Beginning in 2000, plaintiffs filed numerous state court class-action lawsuits against T-Mobile US and several other wireless service operators and wireless telephone manufacturers, asserting product liability, breach of warranty and other claims relating to radio frequency transmissions to and from wireless mobile devices. While these lawsuits were dismissed by the United States Supreme Court with final and binding effect in 2011, several new lawsuits have been filed against T-Mobile US and other manufacturers and carriers in the industry claiming damages for alleged health problems as a result of the use of wireless handsets. The plaintiffs claim that the use of wireless handsets and wireless transmission equipment, such as transmission towers, may be linked to various health concerns, including cancer and brain tumors. The corresponding court proceedings are still ongoing. T-Mobile believes these cases lack merit and is vigorously defending itself.

Disputes in Relation to Intellectual Property Rights

Like many other telecommunications and Internet providers, we are exposed to an increasing number of intellectual property disputes, especially patent litigation. Generally, this leads to a higher risk of having to pay license fees and compensation. Some disputes may even result in cease-and-desist orders that could block our access to, and ability to use, key network technologies.

In particular, since 2015, affiliates of Intellectual Ventures, a patent exploitation enterprise, allege that the defendant Telekom group companies have infringed sixteen patents (including relating to LTE and DSL technology). The claimants have further petitioned the relevant courts to grant motions, *inter alia*, for information and disclosure as well as restraining orders. While the claims are targeted at determining that the legal grounds for damages claims do in fact exist, actual claims for payment of damages have not been filed yet. As of December 2016, the aggregate amount in dispute of these pending lawsuits is approximately EUR 46 million.

Antitrust Proceedings

In recent years, we have significantly expanded our compliance activities with respect to antitrust law. In 2015, independent auditors certified our antitrust compliance management system as effective in accordance with IDW AssS 980 of the German Institute of Public Auditors (*Institut der Wirtschaftsprüfer, IDW*) (*Principles for the Proper Performance of Reasonable Assurance Engagements Relating to Compliance Managements Systems*). This assurance standard is designed to assess whether a compliance management system's policies and procedures are comprehensive, appropriate and effective. Nevertheless, we and some of our subsidiaries, affiliates and joint ventures are subject to various proceedings under antitrust or competition law or civil follow-on actions. In our opinion, the proceedings listed below are of particular importance to us:

European Commission proceedings against Slovak Telekom and Deutsche Telekom

Following an investigation opened in April 2009, the European Commission decided on October 15, 2014 that Slovak Telekom had abused its market power in the Slovak broadband market between 2005 and 2010 and, as a result, imposed fines on Slovak Telekom and Deutsche Telekom. The European Commission argued that Slovak Telekom denied unbundled access to its local loop and had margins squeezed for alternative providers. The fines amount to EUR 38.8 million for Slovak Telekom and Deutsche Telekom and an additional EUR 31.1 million for Deutsche Telekom because Deutsche Telekom had previously been subject to a fine for the manipulation of margins in Germany in 2003 (see "*—Terminated Proceedings—Claims for follow-on damages against Deutsche Telekom or Telekom Deutschland GmbH*" below). The fines were paid in January 2015. As of the date of this offering memorandum, claims totaling EUR 174 million plus interest are still pending .Slovak Telekom and Deutsche Telekom challenged the European Commission's decision on December 29, 2014 before the CJEU, arguing that the European Commission lacked a legal basis to hold Deutsche Telekom liable for the alleged breach of antitrust law by Slovak Telekom. Furthermore, we are convinced that Slovak Telekom complies and complied with applicable law. Proceedings before the CJEU are still pending.

Claims for follow-on damages against Slovak Telekom

Following the decision of the European Commission dated October 15, 2014 (see "*—European Commission proceedings against Slovak Telekom and Deutsche Telekom*" above), Orange Slovensko and SWAN, two telecommunications services providers, filed civil actions against Slovak Telekom with the competent court in Bratislava in August 2015, claiming damages in totaling EUR 249 million plus interest. Further, Slovanet filed an action against Slovak Telekom in 2016 claiming compensation for damages of EUR 63 million plus interest. As of the date of this offering memorandum, the proceedings are still pending and their potential financial impact currently cannot be assessed with certainty.

Terminated Proceedings

Disputes in Relation to the Status and the Rights of Civil Servants

As a legal successor company to Deutsche Bundespost, we employ a substantial number of individuals who, pursuant to the law governing our privatization, have retained their civil servant status. Accordingly, the terms and conditions of their employment and the benefits owed to them continue to be governed by German regulations regarding civil servants.

In particular, pursuant to the German Postal Employees Act (*Postpersonalrechtsgesetz*), we are legally required to make annual contributions — generally 33 percent of the pensionable gross remuneration of active civil servants and the notional pensionable gross remuneration of civil servants on leave of absence — to a special pension fund established to fund pension obligations for the civil servants employed at Deutsche Telekom. The German Postal Employees Act states that the obligation of a Deutsche Bundespost successor company to contribute to the fund may be reduced to a level that is in line with market standards and the obligations borne by peer companies if such successor company can provide evidence to the German government that the current payment obligations would result in an unreasonable burden on its competitiveness.

Deutsche Telekom filed an application with the Federal Ministry of Finance to have its contribution obligations reduced, which was rejected. Deutsche Telekom filed an appeal with the competent administrative court seeking reimbursement of a portion of the contributions paid and a reduction of the contributions to be paid in the future which was dismissed in a ruling dated October 2, 2015. Deutsche Telekom filed an appeal against this ruling with the Higher Administrative Court (*Oberverwaltungsgericht*) Berlin-Brandenburg in November 2015. This suit was dismissed as was the appeal lodged against its dismissal. As Deutsche Telekom has refrained from further litigation in this matter, the proceedings have been terminated and the judgment is now final.

DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

Management and Supervision

The management and supervisory structures, as well as the compensation system for the Board of Management are oriented toward the long-term performance of the Group. The compensation systems for the Board of Management and the Supervisory Board follow the recommendations of the German Corporate Governance Code.

The Supervisory Board

The Supervisory Board advises the Board of Management and oversees its management of business. In accordance with the German Stock Corporation Act (*Aktiengesetz*) and the German Co-Determination Act of 1976 (*Mitbestimmungsgesetz*), our Supervisory Board consists of twenty members, ten of whom represent our shareholders and ten of whom represent our employees. Members of the Supervisory Board may be elected for a term of up to five years and re-election is permitted. The Chairman and the Deputy Chairman are elected by the Supervisory Board in accordance with the rules of the German Co-Determination Act.

Supervisory Board members representing our shareholders are elected at the annual shareholders' meeting. The terms of office of the shareholder representatives expire at the end of the shareholders' meeting at which the shareholders discharge the Supervisory Board members in respect of the fourth financial year following the member's commencement of tenure of office (unless a shorter term is determined by the shareholders' meeting). The financial year in which tenure of office commences is not counted for this purpose.

Supervisory Board members representing our employees are elected by our employees in accordance with the provisions of the German Co-Determination Act. Employees elect ten representatives, made up of regular employees, at least one senior management employee and three union representatives. Civil servants are included in these groups of employee representatives for purposes of these elections.

Pursuant to the German Stock Corporation Act, as amended by the Law on the Equal Participation of Women and Men in Leadership 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*) which entered into force on May 1, 2015, we are required to maintain a fixed minimum of 30 percent of women on our Supervisory Board. With eight women currently serving as members of our Supervisory Board (40 percent), we are complying with the statutory requirement.

A member of the Supervisory Board elected by our shareholders may be removed by a shareholders' resolution by a simple majority of the votes cast. A member of the Supervisory Board elected by our employees may be removed by a majority of at least three-quarters of the votes cast by the relevant class of employees or union representatives who elected the relevant Supervisory Board members and by an additional majority of at least three-quarters of our employees' delegates in accordance with the German Co-Determination Act.

The Supervisory Board is required by law to meet at least twice every six months. To achieve a quorum, at least ten of the members of the Supervisory Board must be present or cast their votes in writing. Except in situations in which a different majority is required by law, such as the appointment of members of the Board of Management or the election of the Chairman and Deputy Chairman, the Supervisory Board makes decisions by simple majority of the votes cast. If, in the event of a deadlock, a second vote again results in a tie, the Chairman of the Supervisory Board can cast the deciding vote.

Composition of the Supervisory Board

The current members of our Supervisory Board and their principal occupations are listed below:

<u>Shareholder representatives</u>

- Prof. Dr. Lehner, Ulrich, Member of the Shareholders' Committee of Henkel AG & Co. KGaA, Düsseldorf; Chairman of the Supervisory Board of Deutsche Telekom AG, Bonn
- Dr. Rolf Bösinger, State Secretary, Federal Ministry of Finance, Berlin
- Hinrichs, Lars, CEO of Cinco Capital GmbH, Hamburg
- Dr. Jung, Helga, Member of the Board of Management of Allianz SE, Munich

- Prof. Dr. Kaschke, Michael, CEO & President of Carl Zeiss AG, Oberkochen
- Kollmann, Dagmar, Entrepreneur, member of several supervisory boards and advisory boards as well as the Monopolies Commission
- Streibich, Karl-Heinz, CEO of Software AG, Darmstadt
- Dr. Bräunig, Günther, Chief Executive Officer of KfW
- Krüger, Harald, Chairman of the Management Board of Bayerische Motoren Werke Aktiengesellschaft, Munich.
- Suckale, Margret, former member of the Board of Executive Directors of BASF SE, Ludwigshafen

<u>Employee representatives</u>

- Schröder, Lothar, Member of the ver.di National Executive Committee, Berlin; Deputy Chairman of the Supervisory Board of Deutsche Telekom AG, Bonn
- Bednarski, Josef, Chairman of the Group Works Council at Deutsche Telekom AG, Bonn
- Brandl, Monika, Chairwoman of the Central Works Council of Deutsche Telekom AG, Bonn
- Topel, Karin, Chairwoman of the Works Council at Deutsche Telekom Technik GmbH, Bonn, Technical Branch Office Eastern District.
- Chatzidis, Odysseus D., Chairman of the European Works Council at Deutsche Telekom AG, Bonn.
- Hanas, Klaus-Dieter, Chairman of the Works Council at Deutsche Telekom Kundenservice GmbH, Central-Eastern District, Bonn
- Koch, Nicole, Chairwoman of the Works Council at Privatkunden Vertriebsgesellschaft mbH, Bonn
- Kreusel, Petra Steffi, Senior Vice President Partner Management and Corporate Development TCat T-Systems International GmbH, Frankfurt am Main; Deputy Chairwoman of the Group Executive Staff Representation Committee of Deutsche Telekom AG, Bonn; Deputy Chairwoman of the Executive Staff Representation Committee of T-Systems International GmbH, Frankfurt am Main
- Sommer, Michael, Trade Union Secretary, former Chairman of the German Confederation of Trade Unions (DGB), Berlin
- Spoo, Sibylle, Lawyer, Trade Union Secretary at the ver.di Federal Administration, Berlin

Changes in the composition of the Supervisory Board

Sylvia Hauke resigned from her position as a member of the Supervisory Board of Deutsche Telekom effective midnight, June 30, 2017. Dr. Wulf H. Bernotat died on August 27, 2017. He had been a member of the Supervisory Board of Deutsche Telekom since January 1, 2010. Hans-Jürgen Kallmeier resigned from his position as a member of the Supervisory Board of Deutsche Telekom effective midnight, December 31, 2017. Dr. Ulrich Schröder resigned from his position as a member of the Supervisory Board of Deutsche Telekom effective February 6, 2018. Johannes Geismann resigned from his position as a member of the Supervisory Board of Deutsche Telekom effective as of the end of the annual shareholders' meeting on May 17, 2018. Sari Baldauf ceased to be a member of the Supervisory Board of Deutsche Telekom after her term of office ended at the end of the annual shareholders' meeting on May 17, 2018. Monika Brandl will retire as a member of the Supervisory Board of Deutsche Telekom effective June 30, 2018. We are currently in the process of finding a suitable candidate to be presented to the court as a replacement member of the Supervisory Board of Deutsche Telekom.

The shareholders' meeting on May 31, 2017 elected Dagmar P. Kollmann to the Supervisory Board for another term of office. Karin Topel was appointed by the court to the Supervisory Board of Deutsche Telekom effective July 1, 2017. Margret Suckale was appointed by the court to the Supervisory Board of Deutsche Telekom effective September 28, 2017 and was elected by the shareholders' meeting on May 17, 2018 for a term of office. Odysseus Chatzidis was appointed by the court to the Supervisory Board of Deutsche Telekom effective January 3, 2018. Dr. Günther Bräunig was appointed by the court to the Supervisory Board of Deutsche Telekom effective March 15, 2018 and elected by the shareholders' meeting on May 17, 2018 for a term of office. The The shareholders' meeting on May 17, 2018 elected Harald Krüger to the Supervisory Board for a term of office and elected Prof. Dr. Ulrich Lehner for another term of office. The members of the Supervisory Board Josef Bednarski, Monika Brandl, Klaus-Dieter Hanas, Petra Steffi Kreusel, Lothar Schröder, Michael Sommer, and Sibylle Spoo were appointed by the court to continue their mandates until the next election of employee representatives to the Supervisory Board scheduled for November 2018. Dr. Rolf Bösinger was appointed by the court to the Supervisory Board effective June 1, 2018.

Basis of Supervisory Board compensation

The compensation received by the members of our Supervisory Board is set forth in § 13 of our Articles of Incorporation. Under the compensation system that came into effect on January 1, 2013, each member of the Supervisory Board receives fixed annual compensation of EUR 70,000.00. The Chairman of the Supervisory Board receives an additional EUR 70,000.00 and the Deputy Chairman an additional EUR 35,000.00. Members of the Supervisory Board appointed to a Supervisory Board committee also receive additional compensation. The annual shareholders' meeting held on May 25, 2016 decided to amend § 13 of our Articles of Incorporation so as to raise the additional compensation for members of Supervisory Board committees. 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. Deutsche Telekom also reimburses value-added tax payable on remuneration and expenses.

For additional information, see Note 40 "*Compensation of the Board of Management and the Supervisory Board*" to our consolidated financial statements as of and for the year ended December 31, 2017 included elsewhere in this offering memorandum.

The Board of Management

The members of the Board of Management are appointed and discharged by the Supervisory Board in accordance with § 84 of the German Stock Corporation Act and § 31 of the German Co-Determination Act (or, in exceptional cases in accordance with § 85 of the German Stock Corporation Act by a court).

Pursuant to § 111(5) of the German Stock Corporation Act, as amended by the Law on the Equal Participation of Women and Men in Leadership Positions in the Private and the Public Sector, our Supervisory Board is obliged to define individual targets for the representation of women on the Board of Management on a regular basis. In 2015, our Supervisory Board resolved that the current proportion of women on the Board of Management (1 out of 7) was at least to remain stable until the end of 2015 and that it should increase to at least 2 out of 7 by the end of 2020.

Since January 1, 2017, Board of Management responsibilities have been distributed across eight Board departments. Five of these cover central management areas:

- Chairman of the Board of Management
- 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

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)	T-Systems

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

Changes in the composition of the Board of Management and its Structure

The Supervisory Board of Deutsche Telekom resolved in its meeting on August 30, 2016, to reappoint Dr. Thomas Kremer as member of the Board of Management responsible for Data Privacy, Legal Affairs and Compliance effective June 1, 2017 The Supervisory Board of Deutsche Telekom resolved in its meeting on December 14, 2016, to reappoint Reinhard Clemens as member of the Board of Management responsible for T-Systems effective December 1, 2017. By a resolution on May 30, 2017, the Supervisory Board of Deutsche Telekom reappointed Dr. Christian Illek as member of the Board of Management responsible for Human Resources effective April 1, 2018.

The Supervisory Board of Deutsche Telekom resolved in its meeting on July 18, 2017, in agreement with the request of Niek Jan van Damme, the Board of Management member responsible for Germany at Deutsche Telekom, 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 also appointed Dr. Dirk Wössner as the new Board member responsible for Germany effective January 1, 2018.

The Supervisory Board of Deutsche Telekom 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, 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 also appointed Adel Al-Saleh as the new Board of Management member responsible for T-Systems effective January 1, 2018.

At its meeting on February 21, 2018, the Supervisory Board of Deutsche Telekom resolved to extend Timotheus Höttges' contract as Chairman of our Board of Management by five years. Timotheus Höttges will be reappointed as Chairman of the Board of Management effective January 1, 2019. Also at its meeting on February 21, 2018, the Supervisory Board of Deutsche Telekom resolved to appoint Dr. Christian P. Illek as Chief Financial Officer (CFO) effective January 1, 2019. The current CFO, Thomas Dannenfeldt, will leave Deutsche Telekom for personal reasons following the expiration of his contract at the end of 2018.

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*) that has been in effect since August 5, 2009. The shareholders' meeting of Deutsche Telekom on May 3, 2010 approved this new system.

The compensation of Board of Management members is comprised of various components. Under the terms of their service contracts, members of the Board of Management are entitled to 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 defines the structure of the compensation system for the Board of Management and reviews this structure and the appropriateness of the 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. Board of Management compensation is oriented toward our sustained development and there is a multi-year measurement base in the new system 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, we grant 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.

Employment outside of the Group generally requires prior approval by the Supervisory Board. Generally, no additional compensation is paid to members of the Board of Management for board memberships of other Group entities.

For more information on the compensation of the Board of Management and the disclosures required by § 314 of the German Commercial Code, German Accounting Standard No. 17 (GAS 17), and the German Corporate Governance Code, please refer to Note 40 "*Compensation of the Board of Management and the Supervisory Board*" to our consolidated financial statements as of and for the year ended December 31, 2017 included elsewhere in this offering memorandum.

Employees

Headcount development

Employees in the Group	As of March 31, 2018	As of December 31, 2017	2016	2015	2014
Total	**216,926**	**217,349**	**218,341**	**225,243**	**227,811**
Of which: Deutsche Telekom AG	20,985	21,428	22,571	26,205	28,569
Of which: civil servants (in Germany, with an active service relationship)	15,077	15,482	15,999	18,483	19,881
Germany operating segment[1]	64,695	64,798	65,452	67,927	68,754
United States operating segment	45,119	45,888	44,820	44,229	39,683
Europe operating segment[1]	47,986	47,421	46,808	48,920	53,499
Systems Solutions operating segment	37,963	37,924	37,472	37,850	46,244
Group Development[2]	1,971	1,967	2,572	2,768	-
Group Headquarters & Group Services	19,192	20,222	21,216	23,548	19,631
Breakdown by geographic area					
Germany	101,579	101,901	104,662	110,354	114,749
International	115,347	115,448	113,679	114,888	113,061
Of which: other EU Member States	60,617	59,952	59,456	60,710	63,032
Of which: rest of Europe	2,585	2,620	2,581	2,945	3,127
Of which: North America	45,540	46,332	45,364	44,803	40,346
Of which: rest of world	6,605	6,543	6,278	6,431	6,556

By December 30, 2017, our Group's headcount decreased by 0.5 percent compared with December 31, 2016, and by December 31, 2016, the headcount had decreased by 3.1 percent compared with December 31, 2015, both for the reasons stated below.

Germany

The headcount in our Germany operating segment as at December 31, 2017 decreased by 2.3 percent compared with December 31, 2016 due to measures to enhance efficiency, a slowdown in recruitment in the operating units, and the take-up of socially responsible instruments.

As at December 2016, the headcount in this segment had decreased by 3.6 percent compared with December 31, 2015. However, this development was partially offset by a transfer of 480 employees from the Systems Solutions operating segment to the Germany operating segment as of January 1, 2016.

United States

The total number of employees in our United States operating segment increased by 2.4 percent as 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..

1 We assigned Vivento Customer Services GmbH, a provider of call center services, to our Germany operating segment as of January 1, 2018; previously it was part of our Group Headquarters & Group Services segment. Comparative figures have been adjusted retrospectively

2 Since January 1, 2017, we have included in our segment reporting the Group Development operating segment and, within the Group Headquarters & Group Services segment, the Board of Management department Technology and Innovation. Comparative figures have been adjusted retrospectively.

As at December 31, 2016, the total number of employees in in this segment had increased by approximately 1.3 percent compared with December 31, 2015 due to a decrease in customer acquisition employees, which was partially offset by an increase in network and administrative employees.

Europe

In our Europe operating segment, staff levels as at December 31, 2017 had increased by 1.3 percent compared to December 31, 2016, due to the extra employees needed at our national company in Poland to staff the new branches opened there.

As at December 31, 2016, staff levels in this operating segment decreased by 4.4 percent compared with December 31, 2015, mainly as a result of efficiency enhancement measures in the segment, especially in Hungary, Poland, and Croatia.

Systems Solutions

The headcount in our Systems Solutions operating segment as at December 31, 2017 increased by 1.2 percent, compared to December 31, 2016, largely as a result of the integration of Telekom Security employees.

As at December 31, 2016, the headcount had decreased by 1.8 percent compared with December 31, 2015, largely due to staff restructuring measures in Germany and abroad, and the relocation of 480 employees to the Germany operating segment (see "*—Employees—Germany*" above).

Group Development

In our Group Development operating segment, the number of employees declined by 23.5 percent as at December 31 2017, compared with December 31 2016, primarily as a result of the deconsolidation of Strato AG as of March 31, 2017.

Group Headquarters & Group Services

The number of employees in our Group Headquarters & Group Services segment had decreased by 4.7 percent as at December 31, 2017 compared to December 31, 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.

Numbers decreased by 11.8 percent as at December 31, 2016, compared with December 31, 2015, mainly due to continued staff restructuring.

Collective bargaining

On April 12, 2018, Deutsche Telekom and the trade union Vereinte Dienstleistungsgewerkschaft ("ver.di") reached agreements on the terms for a collective bargaining agreement (*Tarifvertrag*) for Deutsche Telekom, Telekom Deutschland GmbH, Deutsche Telekom Service GmbH, Deutsche Telekom Außendienst GmbH, Deutsche Telekom Technik GmbH, and Deutsche Telekom Geschäftskunden-Vertrieb GmbH. The new collective bargaining agreement, *inter alia*, provides for salary increases of 2.7 percent (3.1 percent for lower salary groups) with retroactive effect as of May 1, 2018 and an additional 2.1 percent increase as of May 1, 2019 for all salaries covered by the collective bargaining agreement. The new agreement took effect retroactively as of February 1, 2018 and has a twenty-six-months term.

Further, on April 12, 2018, Deutsche Telekom and ver.di reached agreements on the terms for a collective bargaining agreement (*Tarifvertrag*) for Deutsche Telekom IT GmbH and Deutsche Telekom Individual Solutions & Products GmbH. The new collective bargaining agreement, *inter alia*, provides for salary increases of 2.6 percent (3.0 percent for lower salary groups) with retroactive effect as of July 1, 2018 and an additional 2.0 percent increase as of July 1, 2019 for all salaries covered by the collective bargaining agreement. The new agreement took effect retroactively as of April 1, 2018 and has a two-year term.

Under the aforementioned collective bargaining agreements, dismissals for operational reasons (*betriebsbedingte Beendigungskündigungen*) are ruled out until December 31, 2020.

The collective negotiations for T-Systems and its German subsidiaries are still ongoing (status: June, 2018).

Civil servants

Although no employees hired after January 1, 1995 have been granted civil servant status, we employ a substantial number of civil servants. Pursuant to the law governing our privatization, our civil servant employees retained their civil servant status. Accordingly, the terms and conditions of their employment and the benefits owed to them continue to be governed by German regulations regarding civil servants. In particular, civil servant salaries are set by statute and not by us or by collective bargaining agreements. In addition, civil servants are tenured employees and may not be unilaterally terminated except in extraordinary, statutorily defined circumstances. Civil servants are not permitted to participate in work-related actions such as strikes, but are permitted to join labor unions. Although we are authorized, pursuant to the law governing our privatization, to exercise generally the rights and duties of the Federal Republic as the employer of civil servants, the Federal Postal and Telecommunication Agency (*Bundesanstalt für Post und Telekommunikation or the Federal Agency*) has a right of consultation in the implementation of certain aspects of the terms under which we employ civil servants.

Under the German Postal Employees Act (*Postpersonalrechtsgesetz*), which governs the legal position of civil servants at Deutsche Telekom, we have been given greater flexibility with respect to our relationship with our civil servants. Among other things, we were able to eliminate the Christmas bonus thus enabling us to finance the reduction in weekly working hours from 41 to 38 under our employment alliance, which also applied to civil servants from April 2004. Based on the agreement and the applicable law, we may assign tasks in companies within or outside the Group to active civil servants. The civil servants' compensation, healthcare and pension entitlements have been maintained. Under certain circumstances, civil servants may also be transferred, even without their consent, to companies in which Deutsche Telekom has a direct or indirect majority shareholding. However, there is a risk that civil servants who have been transferred and whose civil servant status has been temporarily suspended may return to Deutsche Telekom, for example, after the completion of their work at one of our subsidiaries. Although we attempt to reduce the financial impacts of this risk through compensation payments from the subsidiaries to Deutsche Telekom, we cannot eliminate it completely.

Since 2004, the measures agreed upon for civil servants in the collective bargaining agreement between Deutsche Telekom and ver.di (*Manteltarifvertrag*) have been funded by various measures, including the elimination of year-end bonuses (Christmas bonuses) based on an amendment of the legal provisions relating to the German Postal Employees Act. Civil servants have raised objections and taken legal action against this amendment but, after the Federal Constitutional Court confirmed its constitutionality in 2012, most claims and appeals were withdrawn or dismissed by the competent courts.

Pensions

We manage our pension commitments based on our Group-wide Global Pension Policy. This policy is designed to ensure that Group minimum standards regarding the granting and management of company pension benefits are complied with on a worldwide basis, that plans are harmonized, and other risks to the core business are avoided or reduced. In addition, the policy provides guidelines for the implementation and management of pension commitments and defines the requirements for the launch, adjustment, and closure of corresponding plans. The regulations and provisions in our Group policy take into account national differences in state pension and other commitments under labor, tax, and social law and common business practices in the area of pension commitments.

In Germany, we offer defined benefit plans based on defined contribution-like pension commitments (*Beitragsorienterte Leistungszusagen*). We also established a contractual trust arrangement ("CTA"), Deutsche Telekom Trust e. V., in Germany in 2011 to allow for additional funding of pension obligations. A CTA is a legally structured trust agreement to cover unfunded pension commitments with plan assets, and to provide greater protection against insolvency for these obligations. In addition, specific arrangements are in place with respect to pensions for civil-servants.

Defined benefit plans

We maintain defined benefit pension plans in various countries on the basis of the pensionable compensation of our employees and their length of service. Some of these pension plans are financed through external pension funds (including the German CTA), and some remain unfunded. Provisions for pensions are actuarially measured using the projected unit credit method for defined benefit pension plans, taking into account not only the pension obligations and vested pension rights known as of the end of the 2015 financial year, but also expected future salary and benefit increases.

As of December 31, 2017, provisions for pensions and other employee benefits (defined benefit liability according to International Accounting Standard 19) amounted to EUR 8.4 billion (December 31, 2016: EUR 8.5 billion). 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 as of December 31, 2017 were slightly higher compared to the previous year.

With respect to the defined benefit pension plans the following table presents the development of plan assets at fair value for the periods indicated:

	2017	2016	2015
		(millions of €)	
		(audited)	
Plan assets at fair value as of January 1	**2,990**	**2,744**	**2,498**
Changes attributable to business combinations/transfers of operation/acquisitions and disposals	0)	0	0
Interest income on plan assets (calculated using the discount rate)	48	57	50
Amount by which the actual return exceeds (falls short of) the interest income on plan assets (remeasurement)	105	33	(82)
Contributions by employer	10	264	276
Contributions by plan participants	4	5	5
Benefits actually paid from plan assets	(31)	(32)	(31)
Settlements	0	(58)	–
Administration costs	0	0	0
Tax payments	–	–	–
Exchange rate fluctuations for plans in foreign currency	(24)	(23)	28
Plan assets at fair value as of December 31	**3,102**	**2,990**	**2,744**

Contributions by employer as of December 31, 2017 include a payment of EUR 10 million (December 31, 2016: EUR 264 million) to our CTA in Germany. The contributions by employer are usually allocated at year-end.

The following tables present the breakdown of plan assets at fair value by investment category as of the dates indicated:

millions of EUR	December 31, 2017	Of which: price in an active market	Of which: price without an active market
		(millions of €)	
		(audited)	
Equity securities	1,312	1,312	0
Debt securities	1,244	1,244	0
Real estate	56	56	0
Derivatives	0	0	0
Investment funds	0	0	0
Asset-backed securities	0	0	0
Structured debt instruments	350	350	0
Cash and cash equivalents	2	2	0
Other	138	101	37
Plan assets at fair value	3,102	3,065	37

millions of EUR	December 31, 2016	Of which: price in an active market	Of which: price without an active market
		(millions of €)	
		(audited)	
Equity securities	795	795	0
Debt securities	1,870	1,870	0
Real estate	56	56	0
Derivatives	1	1	0
Investment funds	0	0	0
Asset-backed securities	0	0	0
Structured debt instruments	0	0	0
Cash and cash equivalents	135	135	0
Other	133	96	37
Plan assets at fair value	**2,990**	**2,953**	**37**

millions of EUR	December 31, 2015	Of which: price in an active market	Of which: price without an active market

		(millions of €)	
		(audited)	
Equity securities	609	609	0
Debt securities	1,825	1,825	0
Real estate	54	54	0
Derivatives	0	0	0
Investment funds	0	0	0
Asset-backed securities	0	0	0
Structured debt instruments	0	0	0
Cash and cash equivalents	200	200	0
Other	56	14	42
Plan assets at fair value	**2,744**	**2,702**	**42**

As of December 31, 2017, the plan assets at fair value include shares issued by Deutsche Telekom amounting to EUR 3,349 thousand (December 31, 2016: shares totaling EUR 1,364 thousand, December 31, 2015 shares totaling EUR 1,116 thousand) . No other own financial instruments were included in the years shown.

The following table presents the amounts of defined benefit obligations, plan assets and defined benefit obligations in excess of plan assets as of the dates indicated:

	As of December 31,		
	2017	2016	2015
		(millions of €)	
		(audited)	
Defined benefit obligation	11,462	11,427	10,753
Plan assets at fair value	(3,102)	(2,990)	(2,744)
Defined benefit obligations in excess of plan assets	**8,360**	**8,437**	**8,009**

The following table presents the experience-based adjustments with respect to defined benefit obligations and plan assets for the periods indicated:

	2017	2016	2015
		(%)	
(Adjustments)		(audited)	
Experience-based increase (decrease) of defined benefit obligation	0.1	(0.1)	0.0
Experience-based increase (decrease) of plan assets	3.4	1.1	(3.0)

Defined contribution plans

Our contribution paid to the statutory pension scheme (*Deutsche Rentenversicherung*) in Germany in the 2017 financial year totaled EUR 0.3 billion (2016: EUR 0.3 billion, 2015: EUR 0.3 billion). Group-wide, we recognized EUR 131 million (2016: EUR 109 million, 2015: EUR 94 million) from current contributions for additional defined contribution plans in the consolidated income statement in 2017.

Pension contributions for civil servants in the Group

Civil servants employed by us are entitled to pension benefits provided by the German federal government pursuant to the German Civil Servants' Benefits Act (*Beamtenversorgungsgesetz*). Pursuant to the law governing our privatization, we are required to make annual contributions to a special pension fund established to fund such pension obligations. Since January 1, 2013, and based on the Act on the Reorganization of the Civil Service Pension Fund (*Gesetz zur Neuordnung der Postbeamtenversorgungskasse*), the special pension fund is operated by the Federal Postal and Telecommunication Agency. Our contributions under the law governing our privatization generally amount to 33 percent of the pensionable gross remuneration of active civil servants and the notional pensionable gross remuneration of civil servants on leave of absence. In the 2017 financial year, the corresponding expense amounted to EUR 458 million (2016: EUR 516 million; 2015: EUR 538 million). The present value of future payment obligations was EUR 3.1 billion at December 31, 2017 (December 31, 2016: EUR 3.6 billion, December 31, 2015: EUR 4.2 billion).

The Act for the Improvement of the Staff Structure at the Residual Special Asset of the Federal Railways and the Successor Companies of the Former Deutsche Bundespost (*Gesetz zur Verbesserung der personellen Struktur beim Bundeseisenbahnvermögen und in den Unternehmen der Deutschen Bundespost*) allows us to include civil servants in staff restructuring measures. Civil servants of all service grades, who are working in areas where there is a surplus of staff and for whom employment in another area is not possible or cannot reasonably be expected in line with civil service legislation, have been able to apply for early retirement from the age of 55. By virtue of the Act on the Reorganization of the Civil Service Pension Fund, the provisions for early retirement for civil servants were last extended until December 31, 2016. As of December 31, 2017, this resulted in liabilities in an amount of EUR 1,283 million of which EUR 447 million were current (2016: EUR 1,856 million, of which EUR 573 million were current; 2015: EUR 1,451 million, of which EUR 512 million were current).

For more information regarding pensions, see "*Employee Benefits*" and "*Judgments and Estimates—Pension obligations for benefits to non-civil servants*" both contained in the section "*Summary of accounting policies*" in the notes to our consolidated financial statements as of and for the year ended December 31, 2017 incorporated by reference in this offering memorandum as well as notes 12 "*Provisions for pensions and other employee benefits*", 14 "*Other liabilities*" and 35 "*Other financial obligations*".

Personnel costs

The following table presents information on personnel costs in the Group for the periods indicated:

	Q1 2018	2017	2016	2015
	(billions of €)			
	(unaudited)			
Personnel costs in the Group	4.1	15.5	16.5	15.9
Of which: expenses relating to staff-related measures	0.3	2.7	3.5	1.2

ADDITIONAL INFORMATION

We are a stock corporation organized under the laws of the Federal Republic of Germany. Deutsche Telekom AG, Bonn, is the parent company of our Group. Its ordinary registered shares are traded on the Frankfurt Stock Exchange as well as on other German stock exchanges. Information on the capital stock in accordance with § 289a No. 1 of the German Commercial Code (*Handelsgesetzbuch*)can be found in Note 15 "*Shareholders' equity*" to our consolidated financial statements as of and for the financial year ended December 31, 2017 and incorporated by reference in this offering memorandum.

Voting Rights

Each share of Deutsche Telekom entitles its holder to one vote. However, no voting rights exist for treasury shares (around 19 million as of December 31, 2017). The treasury shares include the former trust shares (around 18.5 million) — shares originated in connection with the acquisitions of VoiceStream and Powertel (now T-Mobile US) in 2001 — that were transferred to a custody account of Deutsche Telekom following the dissolution of the trusts at the beginning of 2016 (see "*—Share Repurchase / Treasury Shares*" below).

Authorized Capital and Contingent Capital

The shareholders' meeting on May 31, 2017 authorized our Board of Management to increase our 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 as a whole 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 fractional amounts from shareholders' subscription rights. Furthermore, the Board of Management is authorized, subject to the approval of the Supervisory Board, to exclude shareholders' subscription rights in the event of capital increases against non-cash contributions when issuing new shares for mergers or acquisitions of companies, business units, or interests in companies, including increasing existing investment holdings, or other assets eligible for contribution in conjunction with such acquisitions, including receivables from Deutsche Telekom. However, the portion of the share capital attributable to the new shares issued on the basis of this authorization with subscription rights being excluded, together with the portion of the share capital attributable to new shares or option and/or conversion rights and obligations from bonds issued or sold after May 31, 2017, with subscription rights being excluded, must not exceed 20% of the total share capital as of May 31, 2017, as of the date of the registration of the authorization, or as of the date of issuing the new shares, whichever amount is lowest. If the issue or sale is carried out in accordance with § 186 (3) sentence 4 of the German Stock Corporation Act (*Aktiengesetz*) (directly or by analogy), this shall also constitute an exclusion of subscription rights. The Board of Management is authorized, subject to the approval of the Supervisory Board, to determine the further content of the rights attached to the shares and the conditions according to which the shares are issued (2017 authorized capital).

The shareholders' meeting on May 17, 2018 resolved to cancel the 2014 contingent capital and to replace it with a 2018 contingent capital (described below). As of the date of this offering memorandum, the cancelation of the 2014 contingent capital was pending with the commercial register and is expected to be entered on the commercial register shortly. The shareholders' meeting on May 17, 2018 increased the share capital contingently by up to EUR 1,200,000,000, composed of up to 468,750,000 no par value shares (2018 contingent capital). The contingent capital increase will be implemented only to the extent that

a) 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 or its direct or indirect majority holdings by May 16, 2023, on the basis of the authorization resolution granted by the shareholders' meeting on May 17, 2018, make use of their option and/or conversion rights or

b) those obligated pursuant to the terms 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 or its direct or indirect majority holdings by May 16, 2023, on the basis of the authorization resolution granted by the shareholders' meeting on May 17, 2018, fulfill their respective option or conversion obligations under such instruments (including in the event that, in exercising a redemption option upon maturity of the bond, Deutsche Telekom grants shares in Deutsche Telekom in lieu of payment of the amount due)

and other forms of fulfillment are not used. The new shares 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. Our Supervisory Board is authorized to amend § 5 (3) of our Articles of Incorporation in accordance with the particular usage of the contingent capital and after the expiry of all the option or conversion periods. .

Authorization to Issue Convertible Bonds

The shareholders' meeting on May 17, 2018 authorized our Board of Management to issue, with the approval of our Supervisory Board, on one or more occasions until May 16, 2023, bearer or registered bonds with warrants, convertible bonds, profit participation rights, and/or participating bonds (or combinations of these instruments) having a total nominal amount of up to EUR 8,000,000,000.00 and to grant the holders of the respective bonds option or conversion rights to shares of Deutsche Telkom AG in respect of up to 468,750,000 shares with a portion of the share capital of up to EUR 1,200,000,000.00 in the aggregate, in accordance with the terms and conditions of the bonds (the "2018 Convertible Bond Authorization"). The bonds can be issued with or without a limited term and carry fixed or variable interest. The purpose of the 2018 contingent capital described above is to enable Deutsche Telekom to fulfil its obligation to issue shares upon the exercise of option or conversion rights of holders of bonds issued under the 2018 Convertible Bond Authorization. In general, shareholders have subscription rights to the bonds issued under the 2018 Convertible Bond Authorization. With approval of the Supervisory Board, our Management Board is authorized to exclude the subscription rights of shareholders to the bonds in certain circumstances, including in particular if the issue price of the bonds is not significantly lower than their theoretical market value and if the shares underlying such bonds represent a portion of the share capital of Deutsche Telekom of less than 10 percent. Further details regarding the 2018 Convertible Bond Authorization are set forth in our invitation to our shareholders' meeting held on May 17, 2018 as available on our website.

Shareholder Remuneration

Policy

A dividend of EUR 0.65 for the 2017 financial year for each no par value share carrying dividend rights was paid out in May 2018. We intend to retain our current shareholder remuneration policy for the 2018 financial year, *i.e.*, when determining the dividend amount, *inter alia*, the relative growth of free cashflow is taken into account.

The implementation of this policy is subject to the availability of sufficient distributable balance sheet profits of Deutsche Telekom for the financial year in question, our ability to establish the necessary reserves for any share repurchases and other legal requirements that may be applicable. It is also contingent upon our governing bodies adopting resolutions to this effect, taking into account the company's situation at the time.

Dividend in the Form of Shares

In 2013 we began granting shareholders the option, exercisable by eligible shareholders under the securities laws of their respective jurisdictions, of converting dividend payments into Deutsche Telekom shares instead of receiving a cash payment, which we have repeated every year until 2017 (with respect to the 2016 financial year) but not in 2018 (with respect to the 2017 financial year).

In June 2017, dividend entitlements of Deutsche Telekom shareholders amounting to around EUR 1.4 billion were contributed against issue of new shares from authorized capital and thus did not have an impact on cash flows. Deutsche Telekom carried out an increase in issued capital of around EUR 0.2 billion against contribution of dividend entitlements for this purpose in June 2017. This increased capital reserves by around EUR 1,143 million, and under IFRS, by around EUR 1,175 million. The number of shares increased by 84,556,563. The dividend for the 2017 financial year described above has been paid out in cash in the full amount (*i.e.*, in respect of all shares entitled to receive a dividend) in May 2018.

Share Repurchase / Treasury Shares

Our annual shareholders' meeting resolved on May 25, 2016 to authorize our Board of Management until May 24, 2021 to repurchase shares representing a total share capital of up to EUR 1,179,302,878.72. The shares to be repurchased on the basis of this authorization, when taken together with other shares repurchased by us and still in our possession or attributable to us according to § 71d and § 71e of the German Stock Corporation Act may not at any time account for more than 10 percent of our share capital. Moreover, the requirements under § 71 (2) sentences 2 and 3 of the German Stock Corporation Act must be complied with. In addition, 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. The shares shall be purchased through the stock exchange in adherence to the principle of equal treatment (§ 53a of the German Stock Corporation Act). Shares can 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 resolution of the shareholders' meeting of May 25, 2016, also authorizes our Board of Management to acquire the shares through the use of equity derivatives.

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. The shares can be canceled or sold through the stock market or by way of an offer to all shareholders. The shares may also be used to fulfill the rights of our Board of Management members to receive shares, which the Supervisory Board has granted to these members as part of the arrangements governing the compensation of the Board of Management. The subscription rights of shareholders relating to these shares and their re-sale or re-transfer by us are excluded in certain cases in accordance with the authorization.

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, 110,000 shares were acquired in June 2011, 206,000 shares in September 2011, and 268,000 shares in January 2013. The total volumes amounted to EUR 2,762,000 in the 2011 financial year, and EUR 2,394,000 in the 2013 financial year (excluding transaction costs). This increased the number of treasury shares by 316,000 and 268,000, respectively. Further, 90,000 shares and 860,000 shares were acquired in September and October 2015, respectively, for an aggregate amount of EUR 14,787,000 (excluding transaction costs); these acquisitions increased the number of treasury shares by 950,000. No treasury shares were acquired in 2016, 2017 or 2018 up to the date of this offering memorandum.

We also dispose of treasury shares, in particular in connection with our Share Matching Plan. Under the Share Matching Plan, certain executives may or are obliged to invest a portion of their variable short-term remuneration component, which is based on the achievement of targets set for each such executive for the financial year (Variable I), in Deutsche Telekom shares. Deutsche Telekom, in turn, awards additional shares for every share acquired as part of these executives' aforementioned personal investments. The additional shares are allotted to the beneficiaries of this plan on expiration of a four-year lock-up period. For more information, please refer to the Note 35 "*Share-based payment*" to our consolidated financial statements as of and for the year ended December 31, 2017 incorporated by reference in this offering memorandum.

As part of the acquisition of VoiceStream Wireless Corp., Bellevue, and Powertel, Inc., Bellevue, in 2001 Deutsche Telekom issued new shares from authorized capital to a trustee, for the benefit of holders of warrants, options, and conversion rights, among others. As regards the shares issued to trusts, the respective trustees waived voting rights and subscription rights and, in general, dividend rights for the duration of the trusts' existence. The options or conversion rights mentioned above fully expired in 2013. As a result, the trustee no longer has any obligation to fulfill any claims in accordance with the purpose of the deposit. Following the termination of the trust relationship at the beginning of 2016, the deposited shares were transferred to a custody account of Deutsche Telekom as treasury shares.

For more information, please refer to the Note 15 "*Shareholders' equity*" to our consolidated financial statements as of and for the year ended December 31, 2017 incorporated by reference in this offering memorandum.

Main Agreements that Include a Change of Control Clause

The main agreements entered into by Deutsche Telekom that include a change of control clause principally relate to our bilateral credit lines and several loan agreements. In the event of a change of control, the individual lenders have the right to terminate their respective credit line and, if necessary, serve notice or demand repayment of the loans. A change of control is deemed to take place when a third party, which can also be a group acting jointly, acquires control over Deutsche Telekom.

In connection with Toll Collect, 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 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. At the end of May 2018, the Federal Republic Germany exercised its call option of Toll Collect GmbH. The call option will become effective on August 31, 2018.

On November 2, 2016, Deutsche Telekom signed an amendment to the shareholder agreement with the Hellenic Republic from May 14, 2008 on Hellenic Telecommunications Organization S.A., Athens, Greece (OTE); the amendment concerned the accession of the Hellenic Republic Asset Development Fund (HRADF) as a party to the shareholder agreement in connection with the acquisition of 5% of the shares of OTE from the Hellenic Republic. Under this agreement, the Hellenic Republic, together with HRADF, is, under certain circumstances, entitled to acquire all shares in OTE from Deutsche Telekom 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.

In the master agreement establishing the procurement joint venture BuyIn in Belgium, Deutsche Telekom 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 only jointly) can terminate the master agreement with immediate effect.

Accounting-Related Internal Control System

Our internal control system, or 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 monitors the effectiveness of the ICS — as required by § 107 (3) sentence 2 of the German Stock Corporation Act. The Board of Management has the responsibility to define 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, 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 continually being refined and aims to ensure that the consolidated financial statements of Deutsche Telekom are prepared in accordance with the International Financial Reporting Standards (IFRS) as adopted by the European Union (EU), as well as with the regulations under commercial law as set forth in § 315e (1) of the German Commercial Code. Another objective of the accounting-related ICS is the preparation of annual financial statements of Deutsche Telekom 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. Regarding the accounting-related ICS, there can therefore only ever be relative certainty, but no absolute certainty that material accounting misstatements can be prevented or detected.

Group Accounting manages the processes for the preparation of the consolidated financial statements and the management report. 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, forms the basis of the financial reporting process. In addition, supplementary process directives, such as 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, for measuring pension obligations. Group Accounting ensures these requirements are complied with consistently throughout the Group. The staff involved in the accounting process receive regular training. Deutsche Telekom and the Group companies are responsible for ensuring that Group-wide guidelines and procedures are complied with. The Group companies ensure the compliance and timeliness of their accounting-related processes and systems. They 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 these processes enhances their efficiency and quality and in turn, improves the reliability of the 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 as well as 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 processes 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 eliminating them, and ongoing progress are reported to the Board of Management and additionally to the Audit Committee of the Supervisory Board of Deutsche

Telekom. In order to ensure a high-quality accounting-related ICS, Internal Audit is closely involved in all stages of the process.

Statement by the Board of Management on the Dependent Company Report

Since the Federal Republic of Germany, as minority shareholder of Deutsche Telekom, usually represented a majority at the shareholders' meeting due to the average level of attendance, Deutsche Telekom was a dependent company of the Federal Republic of Germany in accordance with § 17 (1) of the German Stock Corporation Act. At the last three shareholders' meetings, however, the level of attendance rose and the Federal Republic of Germany did not represent a majority at these shareholders' meetings. In the light of this development, our company has not decided yet whether or not to prepare a dependent company report for the 2018 financial year..

Deutsche Telekom is not subject to any control or profit and loss transfer agreement with the Federal Republic of Germany. Under § 312 of the German Stock Corporation Act, the Board of Management of Deutsche Telekom has therefore prepared a dependent company report for the 2017 financial year describing relations between the controlling entity and dependent companies. The Board of Management issued the following statement at the end of the dependent company report for the 2015 financial year: "The Board of Management hereby declares that under the circumstances known to the Board of Management at the time the corporate transactions were performed, Deutsche Telekom received appropriate remuneration for such transactions. Deutsche Telekom did not perform or omit any actions on behalf of, or on the instructions of, the controlling company or any affiliated companies of the Federal Republic."

DESCRIPTION OF THE NOTES AND GUARANTEES

The Notes will be issued under the Agreement, expected to be dated as of June 21, 2018, among the Issuer, the Guarantor and Citibank as fiscal agent and principal paying agent (the "Fiscal Agent," which expression shall, where the context so requires, include any successor for the time being as Fiscal Agent, or the "Paying Agent," where the context so requires, which term shall also include any substitute or additional paying agents from time to time under the Agreement). The Paying Agent is also acting as transfer agent, defeasance agent and registrar of the Notes.

Holders are deemed to have notice of all provisions of the Agreement. The summary information set forth herein does not purport to be complete and is subject to the actual provisions of the Agreement, the Notes and the Guarantees. Copies of the Agreement, the Notes and the Guarantees are available for inspection at the office of the Fiscal Agent. A copy of the Agreement is also available upon request from the Guarantor.

General

The Notes will be the direct, unconditional, unsecured and unsubordinated general obligations of the Issuer. The Notes will rank equally among themselves, without any preference of one over the other by reason of priority of date of issue or otherwise, and at least equally with all other unsecured and unsubordinated general obligations of the Issuer from time to time outstanding. The Notes will be repaid at maturity at a price of 100% of the principal amount thereof. The Notes will be issued in denominations of $150,000 and integral multiples of $1,000 in excess thereof. The Notes do not provide for any sinking fund.

A "Business Day" means a day (other than a Saturday or Sunday) on which commercial banks are open for business (including dealings in foreign exchange and foreign currency) in New York City.

Principal and Interest

The 2028 Notes will be initially limited to $1,200,000,000 aggregate principal amount and will mature on June 21, 2028 and the 2038 Notes will be initially limited to $550,000,000 aggregate principal amount and will mature on June 21, 2038. The 2028 Notes will bear interest at the rate per annum of 4.375% and the 2038 Notes will bear interest at the rate per annum of 4.750%, in each case from June 21, 2018. Interest on the 2028 Notes and the 2038 Notes will be payable semiannually in arrears on June 21 and December 21 of each year, commencing on December 21, 2018. Interest on the Notes will in each case be payable to the holders of record on the Business Day immediately preceding the relevant interest payment date. Interest on the Notes will be calculated on the basis of a 360-day year consisting of twelve 30-day months.

The Notes may be redeemed at any time prior to maturity in the circumstances described under "*—Optional Redemption*" and "*—Optional Tax Redemption*".

If any interest payment date, the date of maturity or the date fixed for redemption of any Note is not a Business Day, then payment of interest or principal need not be made on such date, but may be made on the next succeeding Business Day with the same force and effect as if made on the date of maturity or the date fixed for redemption, and no interest shall accrue for the period after such date.

Guarantees

The Guarantor will fully, unconditionally and irrevocably guarantee (each a "Guarantee" and, collectively, the "Guarantees") the payment of the principal of, premium, if any, and interest on the Notes issued by the Issuer, including any additional amounts that may be payable by the Issuer in respect of its Notes, as described under "*—Additional Amounts*". The Guarantor guarantees the payment of such amounts when such amounts become due and payable, whether at the stated maturity of the Notes, by declaration or acceleration, call for redemption or otherwise.

In the distribution of the assets of any subsidiary of the Guarantor upon the subsidiary's liquidation or reorganization, any creditor of the subsidiary will have a right to participate in the distribution before the creditors of the Guarantor, including holders of the Notes (the "Holders") issued by the Issuer. The Guarantees will be unsecured obligations of the Guarantor.

Additional Notes

The Notes will be issued in the initial aggregate principal amount set forth above. The Issuer may, from time to time, without notice to or the consent of the Holders, create and issue, pursuant to the Agreement and in accordance with applicable laws and regulations, additional notes (the "Additional Notes") maturing on the same maturity date as the other Notes of that series (the 2028 Notes or the 2038 Notes) and having the same terms and conditions under the Agreement (including with respect to the Guarantor and the Guarantees) as the previously outstanding Notes of that series in all respects (or in all respects except for the issue date and the amount and the date of the first payment of interest thereon) so that such Additional Notes shall be consolidated and form a single series with the previously outstanding Notes of that series. Any Additional Notes shall be issued under a separate CUSIP or ISIN number unless the Additional Notes are issued pursuant to a "qualified reopening" of the original series or are otherwise treated as part of the same "issue" of debt instruments as the original series for U.S. federal income tax purposes. Additional Notes, if any, will be issued under a separate offering document or a supplement to this offering memorandum.

Optional Redemption

The Issuer may, at its option, redeem the 2028 Notes as a whole or in part at any time prior to the Optional Redemption Relevant Date upon not less than 30 nor more than 60 days' prior notice, at a redemption price equal to the greater of:

- 100% of the principal amount of the 2028 Notes plus accrued and unpaid interest (and Additional Amounts, if any) to the date of redemption; or

- as determined by the Quotation Agent, the sum of the present values of the remaining scheduled payments of principal and interest (and Additional Amounts, if any) on the 2028 Notes that would be due if such 2028 Notes matured on the Optional Redemption Relevant Date but for the redemption (not including any portion of such payments of interest accrued as of the date of redemption) plus accrued and unpaid interest (and Additional Amounts, if any) to the date of redemption. The present values will be determined by discounting the remaining principal and interest payments to the redemption date on a semiannual basis (assuming a 360-day year consisting of twelve 30-day months), using the Adjusted Treasury Yield.

The Issuer may, at its option, redeem the 2038 Notes as a whole or in part at any time prior to the Optional Redemption Relevant Date upon not less than 30 nor more than 60 days' prior notice, at a redemption price equal to the greater of:

- 100% of the principal amount of the 2038 Notes plus accrued and unpaid interest (and Additional Amounts, if any) to the date of redemption; or

- as determined by the Quotation Agent, the sum of the present values of the remaining scheduled payments of principal and interest (and Additional Amounts, if any) on the 2038 Notes that would be due if such 2038 Notes matured on the Optional Redemption Relevant Date but for the redemption (not including any portion of such payments of interest accrued as of the date of redemption) plus accrued and unpaid interest (and Additional Amounts, if any) to the date of redemption. The present values will be determined by discounting the remaining principal and interest payments to the redemption date on a semiannual basis (assuming a 360-day year consisting of twelve 30-day months), using the Adjusted Treasury Yield.

In addition, the Issuer may, at its option, redeem the 2028 Notes and the 2038 Notes as a whole or in part at any time on or after the relevant Optional Redemption Relevant Date upon not less than 30 nor more than 60 days' prior notice, at a redemption price equal to 100% of the principal amount of the 2028 Notes or the 2038 Notes, as applicable, plus accrued and unpaid interest (and Additional Amounts, if any) to the date of redemption.

"Adjusted Treasury Yield" means, with respect to any redemption date, the rate per annum equal to the semiannual equivalent yield to maturity of the Comparable Treasury Issue, assuming a price for the Comparable Treasury Issue (expressed as a percentage of its principal amount) equal to the Comparable Treasury Price for such redemption date plus 25 basis points in the case of the 2028 Notes and 30 basis points in the case of the 2038 Notes.

"Comparable Treasury Issue" means the U.S. Treasury security selected by the Quotation Agent as having a maturity comparable to the remaining term of the Notes to be redeemed (assuming, for this purpose, that the 2028 Notes and the 2038 Notes matured on the applicable Optional Redemption Relevant Date) that would be utilized, at the time of selection and in accordance with customary financial practice, in pricing new issues of corporate debt securities of comparable maturity to the remaining term of the Notes.

"Comparable Treasury Price" means, with respect to any redemption date, the average of the Quotation Agent's Quotations for the redemption date.

"Independent Investment Banker" means an independent investment banking institution of national standing in the United States appointed by the Issuer.

"Optional Redemption Relevant Date" means, in the case of the 2028 Notes, March 21, 2028 (three months prior to the maturity date), and in the case of the 2038 Notes, December 21, 2037 (six months prior to the maturity date).

"Quotation Agent" means a reference treasury dealer that is a primary U.S. government securities dealer in New York City. The Independent Investment Banker will appoint the Quotation Agent after first consulting with the Guarantor.

"Quotation Agent's Quotations" means with respect to any redemption date, the average, as determined by the Independent Investment Banker, of the bid and asked prices for the Comparable Treasury Issue (expressed in each case as a percentage of its principal amount) quoted in writing to the Independent Investment Banker by the Quotation Agent at 5:00 p. m. on the third business day before the redemption date.

From and after the redemption date, if money for the redemption of the Notes called for redemption is made available as provided in the Agreement and the Notes called for redemption on the redemption date, the Notes will cease to bear interest, and the only right of the Holders will be to receive payment of the redemption price and all unpaid interest accrued to the date of redemption.

If fewer than all of the Notes are to be redeemed, the Fiscal Agent shall select, no more than 60 days prior to the date fixed for redemption, the particular Notes or portions thereof for redemption from the outstanding Notes not previously called for redemption, on a pro rata basis or by such method as the Fiscal Agent deems fair and appropriate and in accordance with the procedures of the Depositary in the case of global securities.

Optional Tax Redemption

The Notes may be redeemed at any time, at the Issuer's (or, if applicable, the Guarantor's) option, as a whole or in part, upon not less than 30 nor more than 60 days' prior notice, at a redemption price equal to 100% of the principal amount of the Notes being redeemed plus accrued and unpaid interest on the principal amount being redeemed (and all Additional Amounts, if any) to (but excluding) the redemption date, if

- (i) as a result of a change in, execution of or amendment to any laws or treaties or the official application or interpretation of such laws or treaties, (a) either the Issuer or the Guarantor would be required to pay Additional Amounts (as described in "*Additional Amounts*" below), or (b) the Guarantor or any of its subsidiaries would have to deduct or withhold tax on any payment to the Issuer to enable the Issuer to make a payment of principal or interest on a Note; and (ii) such obligation cannot be avoided by the Issuer (or the Guarantor) taking reasonable measures available to it. This applies only in the case of changes, executions, amendments, applications or interpretations that occur on or after the date specified in this offering memorandum for the Notes and in the jurisdiction where the Issuer or the Guarantor is incorporated. If the Issuer or the Guarantor is succeeded by another entity, other than in the case referred to below, the applicable jurisdiction will be the jurisdiction in which the successor entity is organized, and the applicable date will be the date the entity became a successor.

- A person into which either the Issuer or Guarantor is merged or to whom it has conveyed, transferred or leased its property (a "successor person") is required to pay an Additional Amount. In this event, the Issuer or the Guarantor would have the option to redeem the Notes even if the Issuer or the Guarantor is required to pay Additional Amounts immediately after such merger, conveyance, transfer or lease. In this case, the Issuer or Guarantor is not required to use reasonable measures to avoid the obligation to pay Additional Amounts in this situation.

Prior to the giving of notice of redemption, the Issuer, the Guarantor or the successor person, as the case may be, will deliver to the Fiscal Agent an officer's certificate, stating that the Issuer, the Guarantor or the successor person, as the case may be, is entitled to effect such redemption and setting forth in reasonable detail a statement of circumstances showing that the conditions precedent to the right of the Issuer, the Guarantor or the successor person to redeem the Notes pursuant to the Agreement have been satisfied.

Modifications and Amendment

The Issuer, the Guarantor and the Fiscal Agent may, with the consent of the Holders of not less than a majority in aggregate principal amount of the Notes then outstanding, evidenced as provided in the Agreement, execute agreements adding any provisions to or changing in any manner or eliminating any of the provisions of the Agreement or of any supplemental agreement or modifying in any manner the rights of the Holders; provided that no such agreement shall (a) change the maturity of the principal of any Note, or reduce the principal amount thereof, or reduce the rate or extend the time of payment of any installment of interest thereon, or change the place or currency of payment of principal of, or interest on, any Note, or change the Issuer's or the Guarantor's obligation to pay Additional Amounts, impair or affect the right of any Holder to institute suit for the enforcement of any such payment on or after the due date therefor (or in the case of redemption, on or after the redemption date) or change in any manner adverse to the interests of the Holders the terms and provisions of the Guarantees in respect of the due and punctual payment of principal amount of the Notes then outstanding plus accrued and unpaid interest (and all Additional Amounts, if any) without the consent of the Holder of each Note so affected; or (b) reduce the aforesaid percentage of Notes, the consent of the Holders of which is required for any such agreement, without the consent of the Holders of the Notes then outstanding.

The Issuer, the Guarantor and the Fiscal Agent may, without the consent of the Holders, from time to time and at any time, enter into a separate or supplemental fiscal and paying agency agreement to:

- to convey, transfer, assign, mortgage or pledge to the Fiscal Agent or another person as security for the Notes any property or assets;

- to evidence the succession of another person to the Issuer or the Guarantor, or successive successions, and the assumption by the successor person of the covenants, agreements and obligations of the Issuer or the Guarantor, pursuant to the Agreement;

- to evidence and provide for the acceptance of appointment of a successor or successors to the Fiscal Agent in any of its capacities;

- to add to the covenants of the Issuer, or the Guarantor, such further covenants, restrictions, conditions or provisions as the Issuer or the Guarantor, as the case may be, shall consider to be for the protection of the Holders, to surrender any power conferred upon the Issuer or the Guarantor and to make the occurrence, or the occurrence and continuance, of a default in any such additional covenants, restrictions, conditions or provisions an Event of Default under the Notes permitting the enforcement of all or any of the several remedies provided in the applicable fiscal agency agreement; *provided*, that in respect of any such additional covenant, restriction, condition or provision such supplemental agreement may provide for a particular period of grace after default (which period may be shorter or longer than that allowed in the case of other defaults) or may provide for an immediate enforcement upon such an Event of Default or may limit the right of the Holders of a majority in aggregate principal amount of the Notes to waive such an Event of Default;

- to modify the restrictions on, and procedures for, resale and other transfers of the Notes pursuant to law, regulation or practice relating to the resale or transfer of restricted securities generally;

- to cure any ambiguity or to correct or supplement any provision contained in the Agreement, the Notes or the Guarantees, or in any supplemental agreement which may be defective or inconsistent with any other provision contained therein or in any supplemental agreement or to make such other provisions in regard to matters or questions arising under the Agreement or under any supplemental agreement as the Issuer may deem necessary or desirable and which shall not adversely affect the interests of the Holders to which such provisions relate; and

- to "reopen" the Notes of any series and create and issue additional Notes of that series having identical terms and conditions as the existing Notes of such series (or in all respects except for the issue date, issue price, the CUSIP number and first interest payment date) so that the additional Notes are consolidated and form a single series with the outstanding such Notes.

Limitation on Liens

So long as any of the Notes remain outstanding, neither the Issuer nor the Guarantor may become obligated on any present or future Capital Market Indebtedness that is secured by a lien on the whole or any part of its present or future assets, unless an equivalent or higher-ranking lien on the same property is granted to the Holders. For the avoidance of doubt, this undertaking shall not apply to any security which is provided by the Issuer or any other subsidiary of the Guarantor over any claims of the Issuer or such other subsidiary of the Guarantor, as the case may be, against the Guarantor or any of its subsidiaries, which claims exist now or arise at any time in the future, as a result of the passing on of the proceeds from the sale by the Issuer or another subsidiary of the Guarantor, as the case may be, of any bonds, provided that any such security serves to secure obligations under such bonds of the Issuer or the other subsidiary of the Guarantor, as the case may be. Any security to be provided pursuant to the preceding sentence may also be provided to a person acting as trustee for the holders of such bonds.

"Capital Market Indebtedness" means any obligation to repay money that is borrowed through the issuance of bonds, notes or other debt securities, which are capable of being quoted, listed or traded on a stock exchange or other recognized securities market. Capital Market Indebtedness does not include any off-balance sheet assets and obligations.

For the avoidance of doubt in respect of asset-backed financings originated by the Issuer or the Guarantor, the expression "assets" does not include assets of the Guarantor that are sold on a non-recourse basis determined in accordance with the civil law applicable to such transaction.

Events of Default

The occurrence and continuance of one or more of the following events will constitute an event of default (an "Event of Default") under the Agreement and the Notes:

a) the Issuer fails to pay principal or interest upon any Note within 30 days from the relevant due date; or

b) the Issuer fails duly to perform any other obligation arising from any Note, or the Guarantor fails to perform any obligation arising from the Guarantee, which failure is not capable of remedy or, if such failure is capable of remedy, such failure continues for more than 60 days after the Issuer or Guarantor has received notice thereof from a Holder; or

c) (i) any Capital Market Indebtedness of the Issuer or the Guarantor becomes prematurely repayable as a result of a default in respect of the terms thereof; or (ii) the Issuer or the Guarantor fails to fulfill any payment obligation in excess of EUR 25,000,000 or the equivalent thereof under any Capital Market Indebtedness or under any guarantee or suretyship given for any Capital Market Indebtedness of any other person within 30 days from its due date or, in the case of a guarantee or suretyship, within 30 days after the guarantee or suretyship has been invoked, unless the Issuer or the Guarantor shall contest in good faith that such payment obligation exists or is due or that such guarantee or suretyship has been validly invoked; or (iii) if a security granted in respect of any Capital Market Indebtedness or any guarantee or suretyship therefor is enforced on behalf of or by the creditor(s) entitled thereto; or

d) the Issuer or the Guarantor announces its inability to meet its financial obligations or ceases its payments; or

e) a court opens insolvency proceedings against the Issuer or the Guarantor, or the Issuer or the Guarantor applies for or institutes such proceedings or offers or makes an arrangement for the benefit of its creditors generally, or the Issuer applies for a "*surseance van betaling*" (within the meaning of the Bankruptcy Act (*Faillissementswet*) of the Netherlands; or

f) the Issuer or the Guarantor goes into liquidation unless this is done in connection with a merger, or other form of combination with another company and such company assumes all obligations contracted by the Issuer or the Guarantor, as the case may be, in connection with this issue; or

g) any governmental order, decree or enactment shall be made in or by The Netherlands or Germany whereby the Issuer or the Guarantor is prevented from observing and performing in full its obligations as set forth in this Indenture and in the Guarantee, respectively, and this situation is not cured within 90 days; or

h) the Guarantee ceases to be valid and legally binding for any reason whatsoever.

If an Event of Default with respect to the Notes occurs and is continuing, then in every such case the Holders of not less than 25% in principal amount of the Notes outstanding may declare the principal amount of all of the Notes to be due and payable immediately, by a notice in writing to the Issuer and the Guarantor, specifying and upon any such declaration such principal amount (or specified amount) shall become immediately due and payable.

At any time after such a declaration of acceleration with respect to the Notes has been made and before a judgment or decree for payment of the money due has been obtained by the Fiscal Agent as provided in the Agreement, the Holders of a majority in principal amount of the outstanding Notes, by written notice to the Issuer, the Guarantor and the Fiscal Agent, may rescind and annul such declaration and its consequences if:

(1) the Issuer or the Guarantor has paid or deposited with the Fiscal Agent a sum sufficient to pay:

(A) all overdue interest on the Notes,

(B) the principal of (and premium, if any, on) any Notes which have become due otherwise than by such declaration of acceleration and any interest thereon at the rate or rates prescribed therefor in the Notes,

(C) to the extent that payment of such interest is lawful, interest upon overdue interest at the rate or rates prescribed therefor in the Notes,

(D) all sums paid or advanced by the Fiscal Agent hereunder and the reasonable compensation, expenses, disbursements and advances of the Fiscal Agent, its agents and counsel;

and

(2) all Events of Default with respect to the Notes, other than the non-payment of the principal of the Notes which have become due solely by such declaration of acceleration, have been cured or waived as provided in the Agreement.

The Holders of a majority in aggregate principal amount of the Notes then outstanding may, by written notice to the Issuer and to the Fiscal Agent, waive all defaults and rescind and annul such declaration and its consequences, except a default

(i) in the payment of the principal of, or any premium or interest on, any Note of such series, or

(ii) in respect of a covenant or provision which under the Agreement cannot be modified or amended without the consent of the Holder of each Outstanding Security of such series affected;

and no such waiver or rescission and annulment shall extend to or shall affect any subsequent default or impair any right consequent thereon.

Limitations on Suits; Unconditional Right of Holder to Initiate Certain Actions

Before a Holder can bring its own lawsuit or other formal legal action or take other steps to enforce its rights or protect its interests relating to the Notes, the following must occur:

- The Holder must give the Fiscal Agent written notice that an event of default has occurred and remains uncured. The holders of 25% in principal amount of the Notes must make a written request that the Fiscal Agent take action because of the default, and must offer indemnity and/or security satisfactory to the Fiscal Agent against the cost and other liabilities of taking that action.

- The Fiscal Agent must have not taken action for 60 days after receipt of the above notice and offer of indemnity and/or security.

Notwithstanding the above, however, the right of any Holder to receive payment of the principal of and interest on its Note on or after the respective due dates expressed in such Note, or to institute suit for the enforcement of any such payment on or after such respective dates, will not be impaired or affected without the consent of such Holder.

Substitution of Issuer; Consolidation, Merger and Sale of Assets

Each of the Issuer and the Guarantor, without the consent of the Holders, is generally permitted to consolidate or merge into, or sell, transfer, lease or convey all or substantially all of their respective assets to, any corporation and the Issuer may at any time substitute for the Issuer either the Guarantor or any Subsidiary (as defined below) of the Guarantor as principal debtor under the Notes, provided that:

(1) in case the Issuer or the Guarantor shall consolidate with or merge into another person or convey, transfer or lease its properties and assets substantially as an entirety to any person, the person formed by such consolidation or into which the Issuer or the Guarantor is merged or the person which acquires by conveyance or transfer, or which leases, the properties and assets of the Issuer or the Guarantor substantially as an entirety shall be a corporation, partnership or trust, shall be organized and validly existing, under the laws of the jurisdiction of its organization shall expressly assume, by an agreement supplemental hereto executed and delivered to the Fiscal Agent in form reasonably satisfactory to the Fiscal Agent, the due and punctual payment of the principal of and any premium and interest (including all Additional Amounts and any additional amounts payable pursuant to subsection (3) below) on all the Notes and the performance or observance of every covenant of the Agreement on the part of the Issuer to be performed or observed, and, in the case of the Guarantor, the due and punctual performance of the Guarantees (including all Additional Amounts and any additional amounts payable pursuant to subsection (3) below) and the performance of every covenant of the Agreement on the part of the Guarantor to be performed or observed;

(2) immediately after giving effect to such transaction and treating any indebtedness which becomes an obligation of the Issuer or the Guarantor as a result of such transaction as having been incurred by the Issuer

or the Guarantor at the time of such transaction, no Event of Default, and no event which, after notice or lapse of time or both, would become an Event of Default, shall have happened and be continuing;

(3) the person formed by such consolidation or into which the Issuer or the Guarantor is merged or to whom the Issuer or the Guarantor has conveyed, transferred or leased its properties or assets (if such person is organized and validly existing under the laws of a jurisdiction other than the United States, any State thereof, or the District of Columbia) agrees to indemnify the Holder of each Note against (a) any tax, assessment or governmental charge imposed on any such Holder or required to be withheld or deducted from any payment to such Holder as a consequence of such consolidation, merger, conveyance, transfer or lease; and (b) any costs or expenses of the act of such consolidation, merger, conveyance, transfer or lease; and

(4) the Issuer or the Guarantor, as the case may be, has delivered to the Fiscal Agent an Officer's Certificate and an Opinion of Counsel, each stating that such consolidation, merger, conveyance, transfer or lease and, if a supplemental agreement is required in connection with such transaction, such supplemental agreement comply with the Agreement and that all conditions precedent herein provided for relating to such transaction have been complied with.

Discharge and Defeasance

The Agreement provides that the Issuer and the Guarantor will be discharged from any and all obligations in respect of the Agreement (except for certain obligations to register the transfer of or exchange Notes, replace stolen, lost or mutilated Notes, make payments of principal and interest and maintain paying agencies) if:

- the Issuer has paid or caused to be paid in full the principal of and interest on all Notes outstanding thereunder;
- the Issuer shall have delivered to the Fiscal Agent for cancellation all Notes outstanding theretofore authenticated; or
- all Notes not theretofore delivered to the Fiscal Agent for cancellation (i) have become due and payable; (ii) will become due and payable in accordance with their terms within one year or (iii) are to be, or have been, called for redemption as described under "*—Optional Redemption*" or "*—Optional Tax Redemption*" within one year under arrangements satisfactory to the Fiscal Agent for the giving of notice of redemption, and, in any such case, the Issuer shall have irrevocably deposited with the Fiscal Agent, in irrevocable trust for the benefit of the holders of such Notes, (a) cash in U.S. dollars in an amount, or (b) U.S. Government Obligations (as defined below) which through the payment of interest thereon and principal thereof in accordance with their terms will provide not later than the due date of any payment, cash in U.S. dollars in an amount, or (c) any combination of (a) and (b), sufficient to pay all the principal of, and interest on (and Additional Amounts, if any), all such Notes not theretofore delivered to the Fiscal Agent for cancellation on the dates such payments are due in accordance with the terms of the Notes and all other amounts payable under the Agreement by the Issuer.

"U.S. Government Obligations" means securities which are (i) direct obligations of the U.S. government or (ii) obligations of a person controlled or supervised by and acting as an agency or instrumentality of the U.S. government, the payment of which is unconditionally guaranteed by the U.S. government, which, in either case, are full faith and credit obligations of the U.S. government payable in U.S. dollars and are not callable or redeemable at the option of the issuer thereof and shall also include a depositary receipt issued by a bank or trust company as custodian with respect to any such U.S. Government Obligation or a specific payment of interest on or principal of any such U.S. Government Obligation held by such custodian for the account of the holder of a depositary receipt; provided that (except as required by law) such custodian is not authorized to make any deduction from the amount payable to the holder of such depositary receipt from any amount received by the custodian in respect of the U.S. Government Obligation or the specific payment of interest on or principal of the U.S. Government Obligation evidenced by such depositary receipt.

Covenant Defeasance

The Agreement also provides that the Issuer and the Guarantor need not comply with certain covenants of the Agreement (including those described under "*—Limitation on Liens*"), if:

- the Issuer or the Guarantor, as the case may be, irrevocably deposits with the Fiscal Agent as trust funds in irrevocable trust, specifically pledged as security for, and dedicated solely to, the benefit of the Holders, (i) cash in U.S. dollars in an amount, or (ii) U.S. government obligations which through the payment of interest thereon and principal thereof in accordance with their terms will provide not later than the due date of any payment cash in U.S. dollars in an amount, or (iii) any combination of (i) and (ii), sufficient to pay all the principal of, and interest on, the Notes then outstanding on the dates such payments are due in accordance with the terms of the Notes;

- certain Events of Default, or events which with notice or lapse of time or both would become such an Event of Default, shall not have occurred and be continuing on the date of such deposit;

- the Issuer, or the Guarantor, as the case may be, delivers to the Fiscal Agent an opinion of tax counsel with respect to U.S. federal income tax matters to the effect that the beneficial owners of the Notes will not recognize income, gain or loss for U.S. federal income tax purposes as a result of the exercise of such Covenant Defeasance and will be subject to U.S. federal income tax on the same amounts, in the same manner and at the same times as would be the case if such Covenant Defeasance had not occurred;

- the Issuer, or the Guarantor, as the case may be, delivers to the Fiscal Agent an opinion of tax counsel in its jurisdiction of incorporation to the effect that such deposit and related Covenant Defeasance will not cause the Holders, other than Holders who are or who are deemed to be residents of such jurisdiction of incorporation or use or hold or are deemed to use or hold their Notes in carrying on a business in such jurisdiction of incorporation, to recognize income, gain or loss for income tax purposes in such jurisdiction of incorporation, and to the effect that payments out of the trust fund will be free and exempt from any and all withholding and other income taxes of whatever nature of such jurisdiction of incorporation or political subdivision thereof or therein having power to tax, except in the case of Notes beneficially owned (i) by a person who is or is deemed to be a resident of such jurisdiction of incorporation or (ii) by a person who uses or holds or is deemed to use or hold such Notes in carrying on a business in such jurisdiction of incorporation; and

- the Issuer, or the Guarantor, as the case may be, delivers to the Fiscal Agent an officers' certificate and an opinion of legal counsel of recognized standing, each stating that all conditions precedent provided for relating to such covenant defeasance have been complied with.

The effecting of these arrangements is also known as "Covenant Defeasance".

Additional Amounts

The Issuer or the Guarantor, as the case may be, will make all payments in respect of the Notes or the Guarantees without withholding or deduction for or on account of any present or future taxes or duties of whatever nature imposed or levied by way of withholding or deduction at source unless such withholding or deduction is required by law. The Issuer or, as the case may be, the Guarantor will pay such Additional Amounts as shall be necessary in order that the net amounts received by the Holders, after such withholding or deduction by or on behalf of a Relevant Jurisdiction (as defined below) shall equal the respective amounts of principal and interest which would otherwise have been receivable in the absence of such withholding or deduction; except that no Additional Amounts shall be payable with respect to:

(a) any tax or other governmental charge which would not have been imposed but for the existence of any present or former connection between such Holder and the Relevant Jurisdiction (other than the mere holding of the Notes and the receipt of payments thereon), including, without limitation, such Holder being or having been a citizen or resident thereof or being or having been present or engaged in trade or business therein or having or having had a permanent establishment therein;

(b) any tax or other governmental charge that would not have been imposed but for a failure by the Holder to comply with any applicable certification, information, identification, documentation or other reporting requirements concerning the nationality, residence, identity or connection with the Relevant Jurisdiction if such compliance is required as a precondition to relief or exemption from such tax or other governmental charge (including without limitation a certification that such Holder is not resident in the Relevant Jurisdiction);

(c) any tax or other governmental charge which would not have been imposed but for a change in law that becomes effective more than 30 days after a payment by the Issuer on the Notes, or by the Guarantor under the Guarantees, as the case may be, becomes due and payable, or is duly provided for and notice thereof is duly published, whichever occurs later;

(d) any tax that would not have been so withheld or deducted if the Notes had been presented for payment within 30 days after the date on which such payment first becomes due, except to the extent that the Holder would have been entitled to Additional Amounts had the Notes been presented for payment on the last day of such 30-day period;

(e) any estate, inheritance, gift, value added, sales, use, excise, transfer, personal property or similar tax, duties, assessments or other governmental charge;

(f) any tax that is payable other than by deduction or withholding from payments on the Notes;

(g) any tax or other governmental charge required to be withheld by any Paying Agent from a payment on the Notes, if such payment can be made without such deduction or withholding by any other Paying Agent; or

(h) any combination of items (a), (b), (c), (d), (e), (f) and (g) above.

The foregoing provisions shall apply mutatis mutandis to any withholding or deduction for or on account of any present or future taxes or governmental charges of whatever nature of any jurisdiction in which any successor Person to the Issuer or the Guarantor, as the case may be, is organized, or any political subdivision or taxing authority thereof or therein. As used in (a), (b) and (d) above, references to Holder shall include the legal or beneficial owner of the Notes and any other party to which the Notes may be attributed for tax purposes as well as, regarding all such parties, including a trustor, trustee, beneficial or legal owner, a fiduciary, settler, beneficiary, partner, member, shareholder, or other equity owner of, or possessor of a power over such party.

References to principal or interest in respect of the Notes shall be deemed to include any Additional Amounts which may be payable as set forth in the Agreement.

"Relevant Jurisdiction" means the jurisdiction (or any political subdivision or taxing authority thereof or therein) in which the Issuer or the Guarantor is incorporated.

Governing Law; Submission to Jurisdiction

The Agreement, the Notes and the Guarantees will be governed by and construed in accordance with the laws of the State of New York.

The Issuer and the Guarantor have irrevocably submitted to the non-exclusive jurisdiction of the courts of any U.S. state or federal court in the Borough of Manhattan in the City of New York, New York with respect to any legal suit, action or proceeding arising out of or based upon the Agreement, the Notes or the Guarantees.

Regarding the Fiscal Agent, Paying Agent, Transfer Agent and Registrar

In acting under the Agreement, and in connection with the Notes and the Guarantees, the Fiscal Agent is acting solely as an agent of the Issuer and does not assume any obligation towards or relationship of agency of trust for or with the Holders of the Notes (and will not be considered a fiduciary). Any funds held by any paying agent for payment of principal of or interest on the Notes shall be held in trust by it for the persons entitled thereto and applied as set forth in the Agreement and in the Notes, but need not be segregated from other funds held by it except as required by law and as agreed upon separately by the Issuer, the Guarantor and the Fiscal Agent.

The Agreement will not oblige the Fiscal Agent to exercise certain responsibilities that may be exercised by trustees with respect to debt securities issued under an indenture, including certain discretionary actions customarily taken by trustees in connection with events of default under such debt securities. For a description of the duties and the immunities and rights of any fiscal agent, paying agent, transfer agent or registrar under the Agreement, reference is made to the Agreement, and the obligations of any fiscal agent, paying agent, transfer agent and registrar to the Holder are subject to such immunities and rights.

The Agreement provides that the Fiscal Agent may resign and that the Issuer may remove the Fiscal Agent or any other Paying Agent in respect of the Notes, but any such resignation or removal will take effect only upon the appointment by the Issuer of, and acceptance of such appointment by, a successor Fiscal Agent or other Paying Agent.

Notices

So long as any Notes are represented by a global note and such global note is held on behalf of a clearing system, notices to Holders may be given by delivery of the relevant notice to that clearing system for communication by it to entitled accountholders or, if any such delivery is not practicable, by publication in a leading English language daily newspaper having general circulation in Europe. Any such notice will be deemed to have been given on the date of first publication or, if published more than once or on different dates, on the first date on which publication is made.

BOOK-ENTRY; DELIVERY AND FORM; SUMMARY OF PROVISIONS RELATING TO NOTES IN GLOBAL FORM

The information set out in the sections of this offering memorandum describing clearing and settlement arrangements is subject to any change or reinterpretation of the rules, regulations and procedures of DTC as currently in effect. The information in such sections concerning clearing systems has been obtained from sources that the Issuer and Guarantor believe to be reliable. The Issuer and Guarantor accept responsibility only for the correct extraction and reproduction of such information, but not for the accuracy of such information. If an investor wishes to use the facilities of any clearing system, it should confirm the applicability of the rules, regulations and procedures of the relevant clearing system. The Issuer and Guarantor will not be responsible or liable for any aspect of the records relating to, or payments made on account of, book-entry interests held through the facilities of any clearing system or for maintaining, supervising or reviewing any records relating to such book-entry interests.

The certificates representing the Notes and the Guarantees will be issued in fully registered form without interest coupons. Notes sold in offshore transactions in reliance on Regulation S will initially be represented by one or more permanent Regulation S global notes in fully registered form without interest coupons, and will be deposited with the fiscal agent as custodian for, and registered in the name of a nominee of, DTC for the accounts of its participants, including Euroclear and Clearstream. Prior to the 40th day after the later of the commencement of the offering of the Notes and the date of the original issue of the Notes, any resale or other transfer of such interests to U.S. persons shall not be permitted unless such resale or transfer is made pursuant to Rule 144A or Regulation S and in accordance with the certification requirements described below.

Notes sold in reliance on Rule 144A will be represented by one or more permanent Rule 144A global notes in definitive, fully registered form without interest coupons, and will be deposited with the fiscal agent as custodian for, and registered in the name of a nominee of, DTC. Beneficial interests in a Rule 144A global note may be transferred to a person who takes delivery in the form of an interest in a Regulation S global note only upon receipt by the fiscal agent of written certifications (in the form or forms provided in the Agreement) and pursuant to the transfer restrictions related to a Rule 144A global note as described in this offering memorandum.

Each global note (and any Notes issued in exchange therefor) will be subject to certain restrictions on transfer set forth therein described under "*Transfer Restrictions*". Except in the limited circumstances described below under "*—Summary of Provisions Relating to Certificated Notes*", owners of beneficial interests in the global notes will not be entitled to receive physical delivery of certificated Notes.

Ownership of beneficial interests in a global note will be limited to persons who have accounts with DTC, or participants, or persons who hold interests through participants. Ownership of beneficial interests in a global note will be shown on, and the transfer of that ownership will be effected only through, records maintained by DTC or its nominee (with respect to interests of participants) and the records of participants (with respect to interests of persons other than participants). Qualified institutional buyers may hold their interests in a Rule 144A global note directly through DTC if they are participants in such system, or indirectly through organizations that are participants in such system.

Investors may hold their interests in a Regulation S global note directly through Euroclear or Clearstream, if they are participants in such systems, or indirectly through organizations that are participants in such systems. Euroclear and Clearstream will hold interests in the Regulations S global notes on behalf of their participants through DTC.

So long as DTC, or its nominee, is the registered owner or holder of a global note, DTC or such nominee, as the case may be, will be considered the sole owner or holder of the Notes represented by such global note for all purposes under the Agreement and the Notes. No beneficial owner of an interest in a global note will be able to transfer that interest except in accordance with DTC's applicable procedures, in addition to those provided for under the Agreement and, if applicable, those of Euroclear and Clearstream.

Conveyance of notices and other communications by DTC to its participants, by each of those participants to its indirect participants, and by participants and indirect participants to beneficial owners of interests in a global note will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time.

The fiscal agent will send any notices in respect of the Notes held in book-entry form to DTC or its nominee.

Neither DTC nor its nominee will consent or vote with respect to the Notes unless authorized by a participant in accordance with DTC's procedures. Under its usual procedures, DTC mails an omnibus proxy to the Issuer as soon as possible after the record date. The omnibus proxy assigns DTC's or its nominee's consenting or voting rights to those participants to whose account the Notes are credited on the record date.

Payments of the principal of, and interest on, a global note will be made to DTC or its nominee, as the case may be, as the registered owner thereof. Neither the Issuer, the Guarantor nor the fiscal agent will have any responsibility or liability for any aspect of the records relating to, or payments made on account of, beneficial ownership interests in a global note or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

The Issuer expects that DTC or its nominee, upon receipt of any payment of principal or interest in respect of a global note, will credit participants' accounts with payments in amounts proportionate to their respective beneficial interests in the principal amount of such global note as shown on the records of DTC or its nominee. The Issuer also expects that payments by participants to owners of beneficial interests in such global note held through such participants will be governed by standing instructions and customary practices, as is now the case with securities held for the accounts of customers registered in the names of nominees for such customers. Such payments will be the responsibility of such participants.

Transfers between participants in DTC will be effected in the ordinary way in accordance with DTC rules and will be settled in same-day funds. Transfers between participants in Euroclear and Clearstream will be effected in the ordinary way in accordance with their respective rules and operating procedures.

Cross-market transfers between persons holding directly or indirectly through DTC, on the one hand, and directly or indirectly through Euroclear or Clearstream participants, on the other, will be effected in DTC in accordance with DTC rules on behalf of the relevant European international clearing system by the relevant European depositary; however, those cross-market transactions will require delivery of instructions to the relevant European international clearing system by the counterparty in that system in accordance with its rules and procedures and within its established deadlines (European time). The relevant European international clearing system will, if the transaction meets its settlement requirements, deliver instructions to the relevant European depositary to take action to effect final settlement on its behalf by delivering or receiving securities in DTC, and making or receiving payment in accordance with normal procedures for same-day funds settlement applicable to DTC. Euroclear and Clearstream participants may not deliver instructions directly to the European depositaries.

Because of time zone differences, credits of securities received in Euroclear or Clearstream as a result of a transaction with a person that does not hold the Notes through Euroclear or Clearstream will be made during subsequent securities settlement processing and dated the first day Euroclear or Clearstream, as the case may be, is open for business following the DTC settlement date. Those credits or any transactions in those securities settled during that processing will be reported to the relevant Euroclear or Clearstream participants on that business day. Cash received in Euroclear or Clearstream as a result of sales of securities by or through a Euroclear participant or a Clearstream participant to a DTC participant will be received with value on the DTC settlement date, but will be available in the relevant Euroclear or Clearstream cash account only as of the first day Euroclear or Clearstream, as the case may be, is open for business following settlement in DTC.

The Issuer expects that DTC will take any action permitted to be taken by a holder of Notes (including the presentation of Notes for exchange as described below) only at the direction of one or more participants to whose account the DTC interests in a global note are credited and only in respect of such portion of the aggregate principal amount of Notes as to which such participant or participants has or have given such direction. However, if there is an event of default under the Notes, DTC will exchange the applicable global note for certificated Notes, which it will distribute to its participants and which may be legended as set forth under the heading "*Transfer Restrictions*".

DTC

DTC is a limited purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code and a "clearing agency" registered pursuant to the provisions of Section 17A of the Exchange Act. DTC holds securities for its participants and facilitates the clearance and settlement of securities transactions between participants through electronic book-entry changes in accounts of its participants, thereby eliminating the need for physical movement of securities certificates. Direct participants include securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. Indirect access to the DTC system is available to others such as banks, brokers, dealers and trust companies that clear through or maintain a custodial relationship with a participant, either directly or indirectly, or indirect participants.

Euroclear

Euroclear holds securities and book-entry interests in securities for participating organizations and facilitates the clearance and settlement of securities transactions between Euroclear participants, and between Euroclear participants and participants of certain other securities intermediaries through electronic book-entry changes in accounts of such participants or other securities intermediaries. Euroclear provides Euroclear participants, among other things, with safekeeping, administration, clearance and settlement, securities lending and borrowing, and related services. Euroclear participants are investment banks, securities brokers and dealers, banks, central banks, supranationals, custodians, investment managers, corporations, trust companies and certain other organizations. Certain of the Initial Purchasers, or other financial entities involved in this offering, may be Euroclear participants. Non-participants in the Euroclear system may hold and transfer book-entry interests in the Notes through accounts with a participant in the Euroclear system or any other securities intermediary that holds a book-entry interest in the securities through one or more securities intermediaries standing between such other securities intermediary and Euroclear.

Investors electing to acquire Notes in the offering through an account with Euroclear or some other securities intermediary must follow the settlement procedures of such intermediary with respect to the settlement of new issues of securities. Notes to be acquired against payment through an account with Euroclear will be credited to the securities clearance accounts of the respective Euroclear participants in the securities processing cycle for the first day Euroclear is open for business following the settlement date for value as of the settlement date.

Investors electing to acquire, hold or transfer Notes through an account with Euroclear or some other securities intermediary must follow the settlement procedures of such intermediary with respect to the settlement of secondary market transactions in securities. Euroclear will not monitor or enforce any transfer restrictions with respect to the Notes. Investors that acquire, hold and transfer interests in the Notes by book-entry through accounts with Euroclear or any other securities intermediary are subject to the laws and contractual provisions governing their relationship with their intermediary, as well as the laws and contractual provisions governing the relationship between such intermediary and each other intermediary, if any, standing between themselves and the individual Notes.

Euroclear has advised that, under Belgian law, investors that are credited with securities on the records of Euroclear have a co-property right in the fungible pool of interests in securities on deposit with Euroclear in an amount equal to the amount of interests in securities credited to their accounts. In the event of the insolvency of Euroclear, Euroclear participants would have a right under Belgian law to the return of the amount and type of interests in securities credited to their accounts with Euroclear. If Euroclear did not have a sufficient amount of interests in securities on deposit of a particular type to cover the claims of all participants credited with such interests in securities on Euroclear's records, all participants having an amount of interests in securities of such type credited to their accounts with Euroclear would have the right under Belgian law to the return of their pro rata share of the amount of interests in securities actually on deposit. Under Belgian law, Euroclear is required to pass on the benefits of ownership in any interests in Notes on deposit with it (such as dividends, voting rights and other entitlements) to any person credited with such interests in securities on its records. Distributions with respect to the Notes held beneficially through Euroclear will be credited to the cash accounts of Euroclear participants in accordance with the Euroclear terms and conditions.

Clearstream

Clearstream advises that it is incorporated under the laws of Luxembourg and licensed as a bank and professional depositary. Clearstream holds securities for its participating organizations and facilitates the clearance and settlement of securities transactions among its participants through electronic book-entry changes in accounts of its participants, thereby eliminating the need for physical movement of certificates. Clearstream provides to its participants, among other things, services for safekeeping, administration, clearance and settlement of internationally traded securities and securities lending and borrowing. Clearstream interfaces with domestic markets in several countries. Clearstream has established an electronic bridge with the Euroclear operator to facilitate the settlement of trades between Clearstream and Euroclear. As a registered bank in Luxembourg, Clearstream is subject to regulation by the Luxembourg Commission for the Supervision of the Financial Sector. As a professional depository, Clearstream is subject to regulation by the Luxembourg Monetary Institute. Clearstream participants are recognized financial institutions around the world, including underwriters, securities brokers and dealers, banks, trust companies and clearing corporations. In the United States, Clearstream participants are limited to securities brokers and dealers and banks, and may include the Initial Purchasers, or other financial entities involved in, this offering. Other institutions that maintain a custodial relationship with a Clearstream participant may obtain indirect access to Clearstream. Clearstream is an indirect participant in DTC. Distributions with respect to Notes held beneficially through Clearstream will be credited to cash accounts of Clearstream participants in accordance with its rules and procedures.

Although DTC, Euroclear and Clearstream are expected to follow the foregoing procedures in order to facilitate transfers of interests in a global note among participants of DTC, Euroclear and Clearstream, they are under no obligation to perform or continue to perform such procedures, and such procedures may be discontinued at any time. Neither the Issuer nor the Guarantor nor the fiscal agent will have any responsibility for the performance by DTC, Euroclear or Clearstream or their respective participants or indirect participants of their respective obligations under the rules and procedures governing their respective operations.

Summary of Provisions Relating to Certificated Notes

If DTC is at any time unwilling or unable to continue as a depositary for the Global Notes and a successor depositary is not appointed by the Issuer within 90 days, or if there shall have occurred and be continuing an event of default with respect to the Notes and a holder so requests, the Issuer will issue certificated Notes, with Guarantees endorsed thereon by the Guarantor, in exchange for the Global Notes. Certificated notes delivered in exchange for book-entry interests will be registered in the names, and issued in denominations of $150,000 and integral multiples of $1,000 in excess thereof, requested by or on behalf of DTC or the successor depositary (in accordance with its customary procedures). Holders of book-entry interests in a Global Security may receive certificated Notes, which may bear the legend referred to under "*Transfer Restrictions*", in accordance with DTC's rules and procedures in addition to those provided for under the Agreement.

Except in the limited circumstances described above, owners of book-entry interests will not be entitled to receive physical delivery of individual definitive certificates. The Notes are not issuable in bearer form.

Subject to any applicable transfer restrictions, the holder of a certificated note bearing the legend referred to under "*Transfer Restrictions*" may transfer or exchange such Notes in whole or in part by surrendering them to the Fiscal Agent. Prior to any proposed transfer of Notes in certificated form, the holder may be required to provide certifications and other documentation to the Fiscal Agent as described above. In the case of a transfer of only part of a note, the original principal amount of both the part transferred and the balance not transferred must be in authorized denominations, and new Notes will be issued to the transferor and transferee, respectively, by the Fiscal Agent. Upon the transfer, exchange or replacement of certificated Notes not bearing the legend described above, the fiscal agent will deliver certificated Notes that do not bear such legend.

Upon the transfer, exchange or replacement of certificated Notes bearing the legend described above, or upon a specific request for removal of the legend from such certificated note, the Fiscal Agent will deliver only certificated Notes bearing such legend or will refuse to remove such legend, as the case may be, unless there is delivered to the Issuer such satisfactory evidence, which may include an opinion of legal counsel of recognized standing, as may be reasonably required by the Issuer that neither the legend nor the restrictions on transfer set forth therein are required to ensure compliance with the provisions of the Securities Act.

Payment of principal and interest in respect of the certificated Notes shall be payable at the office or agency of the Issuer in the City of New York which shall initially be at the corporate trust office of the Fiscal Agent, which is located at 388 Greenwich Street, 6th Floor, New York, NY 10013, provided that at the option of the Issuer with prior notice to the paying agent, payment may be made by wire transfer, direct deposit or check mailed to the address of the holder entitled thereto as such address appears in the note register.

The certificated Notes, at the option of the Holder and subject to the restrictions contained in the Notes and in the Agreement, may be exchanged or transferred, upon surrender for exchange or presentation for registration of transfer at the office of the Fiscal Agent. Any certificated note surrendered for exchange or presented for registration of transfer shall be duly endorsed, or be accompanied by a written instrument of transfer in form satisfactory to the fiscal agent, duly endorsed by the Holder thereof or his attorney duly authorized in writing. Notes issued upon such transfer will be executed by the Issuer and upon the written request of the Issuer, authenticated by the Fiscal Agent, registered in the name of the designated transferee or transferees and delivered at the office of the Fiscal Agent or mailed, at the request, risk and expense of, and to the address requested by, the designated transferee or transferees.

TAXATION

German Tax Considerations

The following is a discussion of certain German tax considerations that may be relevant to you as a holder of the Notes. The discussion does not purport to be a comprehensive description of all the tax considerations that may be relevant to you. The discussion is based on the law as it stands on the date of this offering memorandum and may be subject to change, potentially with retroactive effect. You should consult your own adviser regarding the tax consequences of the purchase, ownership and disposition of the Notes in a light of your particular circumstances, including the aspect of any state, local or other applicable tax laws.

Income Taxation

If you are not a tax resident of Germany and do not otherwise have a connection with Germany other than the mere purchase, holding and disposition of, or the receipt of payments on, the Notes, you will not be subject to income taxation in Germany with your income from the Notes.

If you are an individual and a tax resident of Germany and the income from the Notes constitutes income from capital investment to you (a "German Private Investor"), interest payments received by you with respect to the Notes as well as the gain from the sale or other disposition (including repayment or redemption) of the Notes (*i.e.,* the difference between the proceeds from the sale or disposition of the Notes, after deduction of the expenses that are directly connected with the sale or disposition, and the cost of acquisition), will be subject to personal income tax at a flat rate of 25% (plus 5.5% solidarity surcharge thereon and, if applicable, church tax). In order to determine the amount of the gain, the proceeds derived from the sale or disposition and the acquisition cost are converted into euro at the conversion rate as of the date of acquisition and disposition, respectively (*i.e.,* currency gains are taxable).

Subject to an annual lump-sum allowance for savers (*Sparer-Pauschbetrag*) in the amount of EUR 801 (EUR 1,602 for married couples and registered partners filing jointly) for your overall income from capital investment, you will not be entitled to deduct any expenses incurred in connection with your investment in the Notes. In addition, you will only be able to offset losses from the investment in the Notes against positive income from capital investment but not against other types of income (*e.g.*, employment income).

Collection of the tax (including solidarity surcharge and, if applicable, church tax) by way of withholding through a Disbursing Agent (as described under the caption "*Withholding Tax*" below) will satisfy your tax liability with respect to the aforementioned interest payments and gains (*Abgeltungsteuer*). If a Disbursing Agent has not withheld the tax, you must include the interest payments and the gain from the sale or other disposition of the Notes in your annual income tax return filing; the tax will then be collected by way of assessment.

Upon request, your income from the Notes (and any other income from capital investment) will be taxed at your individual progressive personal income tax rate (in lieu of the flat tax rate) together with your other taxable income if this results in a lower tax burden than the application of the flat tax rate (*Günstigerprüfung*). In this case, the tax withheld by a Disbursing Agent is credited against your final personal income tax liability or, if in excess of such final tax liability, refunded. But even then, you will not be allowed to claim a deduction of expenses actually incurred in connection with your investment in the Notes or to offset losses from the investment in the Notes against other types of positive income.

If you are a tax resident of Germany or otherwise have a connection with Germany other than the mere purchase, holding and disposition of, or the receipt of payments on, the Notes, *e.g.,* because the Notes form part of the business property of a permanent establishment or fixed base maintained in Germany, but you are not a German Private Investor (*e.g.,* because you hold the Notes as business assets), the flat tax regime does not apply to you. In this case, your income from the Notes will be subject to personal income tax at individual progressive tax rates of up to 45% (plus 5.5% solidarity surcharge on such personal income tax and, if applicable, church tax) or, as the case may be, corporate income tax at a rate of 15% (plus 5.5% solidarity surcharge on such corporate income tax). When computing your income, you will be allowed to deduct your expenses incurred in connection with your investment in the Notes under general rules. Income derived from the Notes will also be subject to trade tax at the applicable municipal rate (which varies generally between 7 and 18%) if the Notes form part of the property of a permanent establishment of a commercial business in Germany.

If a convention for the avoidance of double taxation ("DTC") applies in a situation where a resident of Germany is also resident in another jurisdiction, or otherwise has a connection with such jurisdiction, the German taxation right may, in full or in part, be excluded. Prospective investors should consult with their own tax advisors whether a DTC applies.

Withholding Tax

If you are not a tax resident of Germany and do not otherwise have a connection with Germany other than the mere purchase, holding and disposition of, or the receipt of payments on, the Notes, interest payments to you under the Notes as well as gains realized by you on the sale or other disposition of the Notes will not be subject to German withholding tax.

If you are a tax resident of Germany or otherwise have a connection with Germany other than the mere purchase, holding and disposition of, or the receipt of payments on, the Notes, *e.g.,* because the Notes form part of the business property of a permanent establishment or fixed base maintained in Germany, and you keep the Notes in Germany in a custodial account with a Disbursing Agent (as defined below), the Disbursing Agent will be required to withhold tax at a rate of 25% (plus 5.5% solidarity surcharge thereon, resulting in an aggregate withholding rate of 26.375%) from the gross amount of the interest payments to be disbursed or credited to you with respect to the Notes. The Disbursing Agent will be informed by the Federal Central Tax Office (*Bundeszentralamt für Steuern*) about your affiliation with a religious group that levies the church tax. The Disbursing Agent will then automatically withhold church tax (where applicable). You can object in writing to the Federal Central Tax Office providing information about your religious affiliation to the Disbursing Agent. If you so object, the Federal Central Tax Office will notify your local tax office. The local tax office will then request you to file a tax return.

The term "Disbursing Agent" relates to a bank, a financial services institution, a securities trading enterprise or a securities trading bank, each as defined in the German Banking Act (and, in each case, including a German branch of a foreign enterprise, but excluding a foreign branch of a German enterprise) that holds the Notes in custody for you or conducts their sale or other disposition and disburses or credits the income from the Notes to you.

In the event that you sell or otherwise dispose of the Notes (including the redemption or repayment of Notes), the Disbursing Agent will generally be required to withhold tax as in the case of interest payments. If you have kept the Notes in a custodial account with the same Disbursing Agent since their acquisition or, in the event of a transfer of the Notes, your acquisition cost of the Notes has been evidenced to the Disbursing Agent (as described below), the tax is withheld at the above-mentioned rate from the gain (*i.e.,* the difference between the proceeds from the sale or the disposition of the Notes, after deduction of the expenses that are directly connected with the sale or disposition, and the acquisition cost). In order to determine the amount of the gain, the proceeds derived from the sale or disposition and the acquisition cost, are converted into euro at the conversion rate as of the date of acquisition and disposition, respectively (*i.e.,* currency gains are taken into account for withholding).

When you transfer the Notes to another custodial account within Germany, the releasing Disbursing Agent has to inform the accepting Disbursing Agent of your acquisition cost. When you transfer the Notes to a Disbursing Agent from a bank or financial services institution that has its seat in another member state of the European Union or the European Economic Area or in another contracting state pursuant to Article 17 (2) (i) of the directive adopted by the Council of the European Union on June 3, 2003 (2003/48/EC) on the taxation of savings income in the form of interest payments, or from a branch of a German bank or financial services institution established in such state, you can provide evidence of the acquisition cost through certification by such non-German institution. In all other cases, the evidence of the acquisition cost is not permissible.

If, in the event of a transfer of the Notes, the acquisition cost of the Notes has not been evidenced to the Disbursing Agent, the Disbursing Agent has to withhold tax at the above-mentioned rate from an amount equal to 30% of the proceeds from the sale or other disposition of the Notes.

If you transfer Notes that you keep in Germany in a custodial account with a Disbursing Agent to another holder, the Disbursing Agent must treat the transfer as a sale or disposition for withholding tax purposes, unless you inform the Disbursing Agent that the transfer is without consideration. If the Disbursing Agent is not so informed, the Disbursing Agent must withhold tax at the above-mentioned rate from a substitute tax base.

If you are a German Private Investor, you can take advantage of the *Sparer-Pauschbetrag* (as described above) by completing an exemption order (*Freistellungsauftrag*) for the Disbursing Agent. In this case, the Disbursing Agent will not withhold tax on your investment income (including income derived from the Notes) up to the amount shown on the exemption order. Furthermore, the Disbursing Agent will not withhold any tax, if you submit to the Disbursing Agent a certificate of non-assessment (*Nichtveranlagungsbescheinigung*) issued by the local tax office.

If you are subject to personal or corporate income taxation in Germany with your income from the Notes, but the flat tax regime does not apply to you (*i.e.,* because you are not a German Private Investor), the tax withheld by a Disbursing Agent will be credited against your final personal or corporate income tax liability or, if in excess of such final tax liability, refunded. You should consult your tax adviser about ways to avoid or limit withholding by a Disbursing Agent, in particular in the event of a sale or other disposition of the Notes.

If a DTC applies in a situation where a resident of Germany is also resident in another jurisdiction, or otherwise has a connection with such jurisdiction, the investor may be able to avoid withholding or may be able to request a refund for taxes withheld in Germany with respect to income from the Notes. Prospective investors should consult with their own tax advisors whether a DTC applies.

Gift or Inheritance Taxation

The gratuitous transfer of Notes by you as a gift or by reason of your death will be subject to German gift or inheritance tax if you are or the recipient is a resident, or deemed to be a resident, of Germany under German gift or inheritance tax law at the time of the transfer. If neither you nor the recipient is a resident or deemed to be a resident of Germany at the time of the transfer, no German gift or inheritance tax will be levied unless the Notes form part of the property of a permanent establishment or a fixed base maintained by you in Germany. Tax treaties concluded by Germany with respect to gift and inheritance taxes generally permit Germany to tax the transfer in this situation.

Other Taxes

No stamp, issue, registration or similar taxes or duties will be payable in Germany in connection with the issuance, delivery or execution of the Notes. At present, a net assets tax (*Vermögensteuer*) is not levied in Germany. Also, the European Commission's proposal to introduce a financial transaction tax, which could also be applicable under certain circumstances to certain dealings in the Notes, has not been adopted or implemented in Germany.

Common Reporting Standard

The Organisation for Economic Co-Operation and Development released the Common Reporting Standard ("CRS") designed to create a global standard for the automatic exchange of financial account information. On October 29, 2014, 51 jurisdictions signed the Multilateral Competent Authority Agreement (the "Multilateral Agreement") that activates this automatic exchange of information in line with the CRS. Since then, further jurisdictions have signed the Multilateral Agreement and in total over 100 jurisdictions have committed to adopting the CRS. Further, new mandatory automatic exchange of financial account information are implemented under Council Directive 2011/16/EU on Administrative Cooperation in the Field of Taxation (the "DAC"). On 9 December 2014, EU Member States adopted Directive 2014/107/EU on administrative cooperation in direct taxation ("DAC2"), which provides for mandatory automatic exchange of financial information as foreseen in the CRS. DAC2 amends the previous DAC. In Germany, the mandatory automatic exchange of financial information to EU Member States as provided for in the DAC2 has started on 30 September 2017. Under the CRS and legislation enacted in Germany to implement the CRS, DAC and DAC2, certain disclosure requirements are imposed in respect of certain investors in the Notes who are, or are entities that are controlled by one or more individuals who are, residents of any of the jurisdictions that have adopted the CRS, unless a relevant exemption applies. Where applicable, information that would need to be disclosed will include certain information relating to reportable accounts such as the investors in the Notes, the ultimate beneficial owners and/or controllers, and their investment in and returns from the Notes.

All prospective investors should consult with their own tax advisors regarding the possible implication of CRS, DAC, DAC 2 and other similar legislation and/or regulations on their investment in the Notes.

Netherlands Tax Considerations

The following summary of certain Dutch taxation matters is based on the laws and practice in force as of the date of this offering memorandum and is subject to any changes in law and the interpretation and application thereof, which changes could have retroactive effect. The following summary does not purport to be a comprehensive description of all the tax considerations that may be relevant to a decision to acquire, hold or dispose of a Note, and does not purport to deal with the tax consequences applicable to all categories of investors, some of which may be subject to special rules.

For the purpose of this summary it is assumed that the Notes will not be redeemable in exchange for, convertible into or linked to shares, other equity instruments or other debt securities issued or to be issued by the Issuer or by any Dutch tax resident entity that is affiliated to the Issuer.

For the purpose of this summary it is assumed that a holder of a Note neither has nor will have a substantial interest, or - in the case of a holder of a Note being an entity – a deemed substantial interest, in the Issuer and that no connected person (*verbonden persoon*) to the holder of a Note has or will have a substantial interest in the Issuer.

Generally speaking, an individual has a substantial interest in a company if (a) such individual, either alone or together with his partner, directly or indirectly has, or is deemed to have or (b) certain relatives of such individual or his partner directly or indirectly have or are deemed to have (i) the ownership of, a right to acquire the ownership of, or certain rights over, shares representing 5 per cent or more of either the total issued and outstanding capital of such company or the issued and outstanding capital of any class of shares of such company, or (ii) the ownership of, or certain rights over, profit participating certificates (*winstbewijzen*) that relate to 5 per cent or more of either the annual profit or the liquidation proceeds of such company

Generally speaking, a non-resident entity has a substantial interest in a company if such entity, directly or indirectly has (I) the ownership of, a right to acquire the ownership of, or certain rights over, shares representing 5 per cent or more of either the total issued and outstanding capital of such company or the issued and outstanding capital of any class of shares of the Issuer, or (II) the ownership of, or certain rights over, profit participating certificates (*winstbewijzen*) that relate to 5 per cent or more of either the annual profit or the liquidation proceeds of such company. An entity holding a Note has a deemed substantial interest in a company if such entity has disposed of or is deemed to have disposed of all or part of a substantial interest on a non-recognition basis.

For the purpose of this summary, the term "entity" means a corporation as well as any other person that is taxable as a corporation for Dutch corporate tax purposes.

Where this summary refers to a holder of a Note, an individual holding a Note or an entity holding a Note, such reference is restricted to an individual or entity holding legal title to as well as an economic interest in such Note. It is noted that for purposes of Dutch income, corporate and gift and inheritance tax, assets legally owned by a third party such as a trustee, foundation or similar entity, may be treated as assets owned by the (deemed) settlor, grantor or similar originator or the beneficiaries in proportion to their interest in such arrangement.

Where the summary refers to "The Netherlands" or "Dutch" it refers only to the European part of the Kingdom of the Netherlands.

Investors should consult their professional advisers on the tax consequences of their acquiring, holding and disposing of a Note or Coupon.

Withholding Tax

All payments of principal and interest made by the Issuer under the Notes can be made without withholding or deduction of any taxes of whatever nature imposed, levied, withheld or assessed by The Netherlands or any political subdivision or taxing authority thereof or therein.

Taxes on Income and Capital Gains

Residents

<u>Resident entities</u>

An entity holding a Note which is, or is deemed to be, resident in The Netherlands for Dutch corporate tax purposes and which is not tax exempt, will generally be subject to Dutch corporate tax in respect of income or a capital gain derived from a Note at the prevailing statutory rates (up to 25% in 2018).

<u>Resident individuals</u>

An individual holding a Note who is or is deemed to be resident in The Netherlands for Dutch income tax purposes will be subject to Dutch income tax in respect of income or a capital gain derived from a Note at prevailing statutory rates (up to 51.95%) if:

(i) the income or capital gain is attributable to an enterprise from which the holder derives profits (other than as a shareholder); or

(ii) the income or capital gain qualifies as income from miscellaneous activities (*belastbaar resultaat uit overige werkzaamheden*) as defined in the Income Tax Act (*Wet inkomstenbelasting 2001*), including, without limitation, activities that exceed normal, active asset management (*normaal, actief vermogensbeheer*).

If neither condition (i) nor (ii) applies, an individual holding a Note will be subject to income tax on the basis of a deemed return, regardless of any actual income or capital gain derived from a Note. The deemed return amounts to 4% of the average value of the individual's net assets in the relevant fiscal year (including the Note). For 2018, the deemed return ranges from 2.02% to 5.38% of the value of the individual's net assets as at the beginning of the relevant fiscal year (including the Notes). The applicable rates will be updated annually on the basis of historic market yields. The applicable rates will be updated annually on the basis of historic market yields. Subject to application of certain allowances, the deemed return will be taxed at a rate of 30%.

Non-residents

A holder of a Note which is not and is not deemed to be resident in The Netherlands for the relevant tax purposes will not be subject to taxation on income or a capital gain derived from a Note unless:

(i) the income or capital gain is attributable to an enterprise or part thereof which is either effectively managed in The Netherlands or carried on through a permanent establishment (*vaste inrichting*) or a permanent representative (*vaste vertegenwoordiger*) taxable in The Netherlands and the holder of a Note derives profits from such enterprise (other than by way of holding of securities); or

(ii) the holder is an individual and the income or capital gain qualifies as income from miscellaneous activities (*belastbaar resultaat uit overige werkzaamheden*) in The Netherlands as defined in the Income Tax Act (*Wet inkomstenbelasting 2001*), including, without limitation, activities that exceed normal, active asset management (*normaal, actief vermogensbeheer*).

Gift or Inheritance Taxes

Dutch gift or inheritance taxes will not be levied on the occasion of the transfer of a Note by way of gift by, or on the death of, a holder of a Note, unless:

(i) the holder of a Note is, or is deemed to be, resident in The Netherlands for the purpose of the relevant provisions; or

(ii) the transfer is construed as an inheritance or gift made by, or on behalf of, a person who, at the time of the gift or death, is or is deemed to be resident in The Netherlands for the purpose of the relevant provisions.

Value Added Tax

There is no Dutch value added tax payable by a holder of a Note in respect of payments in consideration for the issue or acquisition of the Notes, payments of principal or interest under the Notes, or the transfer or disposal of the Notes.

Other Taxes and Duties

There is no Dutch registration tax, stamp duty or any other similar tax or duty payable in The Netherlands by a holder of a Note in respect of or in connection with the execution, delivery and/or enforcement by legal proceedings (including any foreign judgment in the courts of The Netherlands) of the Notes or the performance of the Issuer's obligations under the Notes.

Residence

A holder of a Note will not be and will not be deemed to be resident in The Netherlands for tax purposes and, subject to the exceptions set out above, will not otherwise become subject to Dutch taxation, by reason only of acquiring, holding or disposing of a Note or the execution, performance, delivery and/or enforcement of a Note.

United States Federal Income Tax Considerations

The following discussion summarizes certain U.S. federal income tax considerations that may be relevant if you are a U.S. holder. You are a "U.S. holder" if you are an individual who is a citizen or resident of the United States, a U.S. domestic corporation, or any other person that is subject to U.S. federal income tax on a net income basis in respect of an investment in the Notes. You are a "non-U.S. holder" if you are a beneficial owner of the Notes that is not a U.S. holder. This summary is based upon provisions of the Internal Revenue Code of 1986, as amended and regulations, rulings and judicial decisions as of the date hereof. Those authorities may be changed, perhaps retroactively, so as to result in U.S. federal income tax consequences different from those summarized below. This summary does not purport to be a comprehensive description of all of the tax considerations that may be relevant to any particular investor, including tax considerations that arise from rules of general application or that are generally assumed to be known by investors.

This summary deals only with U.S. holders who purchase the Notes at original issuance at their issue price and who hold the Notes as capital assets. It does not address considerations that may be relevant to you if you are an investor that is subject to special tax rules, such as a bank, a thrift, a real estate investment trust, a regulated investment company, an insurance company, a dealer in securities or currencies, a trader in securities or commodities that elects mark-to-market treatment, an entity taxed as a partnership (or the partners therein), a non-U.S. holder present in the United States for 183 days or more during the taxable year, a holder that has ceased to be a U.S. citizen or a lawful permanent resident of the United States, a person that will hold the Notes as a hedge against currency risk or as a position in a "straddle", hedge, conversion or other integrated transaction, a tax-exempt organization or a person whose "functional currency" is not the U.S. dollar. In addition, this summary does not discuss any aspect of U.S. federal taxation other than income taxation (such as estate and gift tax laws, the alternative minimum tax or Medicare tax on net investment income) or state, local or non-U.S. tax considerations.

You should consult your tax adviser about the tax consequences of the acquisition, ownership and disposition of the Notes, including the relevance to your particular situation of the considerations discussed below, as well as the relevance to your particular situation of state, local or other tax laws.

U.S. holders that use an accrual method of accounting for tax purposes ("accrual method holders") generally are required to include certain amounts in income no later than the time such amounts are reflected on certain financial statements (the "book/tax conformity rule"). The application of the book/tax conformity rule thus may require the accrual of income earlier than would be the case under the general tax rules described below, although it is not clear to what types of income the book/tax conformity rule applies. This rule generally is effective for tax years beginning after December 31, 2017 or, for debt securities issued with original issue discount, for tax years beginning after December 31, 2018. Accrual method holders should consult with their tax advisors regarding the potential applicability of the book/tax conformity rule to their particular situation.

U.S. Federal Income Tax Consequences to U.S. Holders

Payments of Interest

Payments of interest on a Note will generally be taxable to you as ordinary income at the time it is paid or accrued in accordance with your method of accounting for U.S. federal income tax purposes. In addition, if any Additional Amounts are paid in respect of any taxes withheld from the interest payments, you will also be required to include in income as ordinary income any such Additional Amounts.

It is expected, and this discussion assumes, that the Notes will not be issued with original issue discount ("OID") in an amount equal to or in excess of a *de minimis* amount. In general, however, if the Notes are issued with OID that is equal to or more than a *de minimis* amount, regardless of your regular method of accounting for U.S. federal income tax purposes, you will have to include OID as ordinary gross income under a "constant yield method" before the receipt of cash attributable to such income.

Interest payments will be treated as income from sources outside the United States and you generally will be entitled to deduct or credit taxes that are withheld from the interest payments, subject to certain limitations. Payments of interest on the Notes generally will constitute foreign-source "passive category income" for U.S. foreign tax credit purposes. The rules governing the foreign tax credit are complex. You are urged to consult your tax advisers regarding the availability of the foreign tax credit under your particular circumstances.

Sale, Exchange, Redemption and Retirement of Notes

Upon the sale, exchange, redemption, retirement or other disposition of a Note, you will recognize gain or loss equal to the difference between the amount you realized upon the sale, exchange, redemption, retirement or other disposition (less an amount equal to any accrued interest that you did not previously include in income, which will be taxable as interest income as described under "—*Payments of Interest*" above) and your adjusted tax basis in the Note. Your tax basis in a Note will be, in general, your cost for that Note. Such gain or loss will generally be U.S.-source capital gain or loss and generally will be long-term capital gain or loss if, at the time of the disposition, the Notes have been held for more than one year. Consequently, you may not be able to claim a credit for any foreign tax imposed upon a disposition of a Note unless such credit can be applied (subject to applicable limitation) against tax due on other income treated as derived from foreign sources. Capital gains of individuals derived in respect of capital assets held for more than one year may be eligible for reduced rates of taxation. The deductibility of capital losses is subject to limitations.

Substitution of Issuer

The terms of the Notes provide that, in certain circumstances, the obligations of the Issuer under the Notes may be assumed by another entity. Any such assumption might be treated for U.S. federal income tax purposes as a deemed disposition of Notes by a U.S. holder in exchange for new notes issued by the new obligor. As a result of this deemed disposition, you could be required to recognize capital gain or loss for U.S. federal income tax purposes equal to the difference, if any, between the issue price of the new Notes (as determined for U.S. federal income tax purposes), and your tax basis in the Notes. You should consult your tax adviser concerning the U.S. federal income tax consequences to you of a change in obligor with respect to the Notes.

U.S. Federal Income Tax Consequences to Non-U.S. Holders

Subject to the discussion of backup withholding below, a non-U.S. holder generally will not be subject to U.S. federal income tax (including withholding tax) on payments of interest on the Notes. In addition, a non-U.S. holder generally will not be subject to U.S. federal income tax on gain realized on the sale, exchange, redemption, retirement or other taxable disposition of the Notes.

Foreign Asset Reporting

Certain U.S. holders that own "specified foreign financial assets" with an aggregate value in excess of U.S.$50,000 are generally required to file an information statement along with their tax returns, currently on Form 8938, with respect to such assets. "Specified foreign financial assets" include any financial accounts held at a non-U.S. financial institution, as well as securities issued by a non-U.S. issuer (which would include the Notes) that are not held in accounts maintained by financial institutions. Higher reporting thresholds apply to certain individuals living abroad and to certain married individuals. Regulations extend this reporting requirement to certain entities that are treated as formed or availed of to hold direct or indirect interests in specified foreign financial assets based on certain objective criteria. U.S. holders who fail to report the required information could be subject to substantial penalties. In addition, the statute of limitations for assessment of tax would be suspended, in whole or part. Prospective investors should consult their own tax advisors concerning the application of these rules to their investment in the Notes, including the application of the rules to their particular circumstances.

Information Reporting and Backup Withholding

The paying agent must file information returns with the Internal Revenue Service in connection with Note payments made to certain United States persons. If you are a United States person, you generally will not be subject to U.S. backup withholding tax on such payments if you are a corporation (other than an S Corporation) or other exempt recipient. In either case, you must provide your taxpayer identification number and certify that you have not lost your exemption from backup withholding, if so requested. If you are not a United States person, you may have to comply with certification procedures to establish that you are not a United States person in order to avoid information reporting and backup withholding tax requirements. Backup withholding is not an additional tax. The amount of any backup withholding collected from a payment to you will be allowed as a credit against your U.S. federal income tax liability and may entitle you to a refund, provided that certain required information is timely furnished to the IRS. You should consult your tax adviser about these rules and any other reporting obligations that may apply to the ownership or disposition of Notes.

PLAN OF DISTRIBUTION

The Issuer intends to offer the Notes through the initial purchasers listed in the table below (the "Initial Purchasers"). Citigroup Global Markets Inc., RBC Capital Markets, LLC and TD Securities (USA) LLC are acting as representatives for the Initial Purchasers. Subject to the terms and conditions contained in a purchase agreement dated June 14, 2018 among the Issuer, the Guarantor and the Initial Purchasers (the "Purchase Agreement"), the Issuer has agreed to sell to the Initial Purchasers, and the Initial Purchasers have severally agreed to purchase from the Issuer, the principal amount of each series of Notes listed opposite their names below:

	Principal Amount	
Initial Purchasers	**2028 Notes**	**2038 Notes**
Citigroup Global Markets Inc.	$280,000,000	$128,334,000
RBC Capital Markets, LLC	$280,000,000	$128,333,000
TD Securities (USA) LLC	$280,000,000	$128,333,000
MUFG Securities Americas Inc.	$120,000,000	$55,000,000
NatWest Markets Securities Inc.	$120,000,000	$55,000,000
Société Générale	$120,000,000	$55,000,000
Total	**$1,200,000,000**	**$550,000,000**

The Initial Purchasers have agreed, severally and not jointly, to purchase all of the Notes being sold pursuant to the Purchase Agreement if any of such Notes are purchased. If an Initial Purchaser defaults, the Purchase Agreement provides that the purchase commitments of the non-defaulting Initial Purchasers may be increased or, in certain cases, the Purchase Agreement may be terminated.

The Initial Purchasers have advised the Issuer that they propose initially to offer the Notes for resale at the price listed on the cover page of this offering memorandum. After the initial offering of the Notes, the offering price and other selling terms may from time to time be varied by the Initial Purchasers. The offering of the Notes by the Initial Purchasers is subject to receipt and acceptance and subject to the Initial Purchasers' right to reject any order in whole or in part.

The Issuer and the Guarantor have agreed to indemnify the several Initial Purchasers against certain liabilities, including certain liabilities under the Securities Act, or to contribute to payments the Initial Purchasers may be required to make in respect of those liabilities.

The expenses of the offering, not including the discount to the Initial Purchasers, are estimated at $300,000 and are payable by the Issuer and the Guarantor.

The Initial Purchasers are offering the Notes, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the Notes, and other conditions contained in the Purchase Agreement, such as the receipt by the Initial Purchasers of officer's certificates and legal opinions. The Initial Purchasers reserve the right to withdraw, cancel or modify offers to investors and to reject orders in whole or in part. After the Notes are released for sale, the Initial Purchasers may change the offering prices and other selling terms without notice.

The Notes are a new issue of securities with no established trading market. The Issuer and the Guarantor do not intend to apply for listing of the Notes on any national securities exchange or for inclusion of the Notes on any automated dealer quotation system. The Issuer has been advised by the Initial Purchasers that they presently intend to make a market in the Notes after completion of the offering. However, they are under no obligation to do so and may discontinue any market-making activities at any time without any notice. The Issuer cannot assure the liquidity of the trading market for the Notes. If an active trading market for the Notes does not develop, the market price and liquidity of the Notes may be adversely affected. If the Notes are traded, they may trade at a discount from their initial offering price, depending on prevailing interest rates, the market for similar securities, the operating performance and financial condition of the Issuer and the Guarantor, general economic conditions and other factors. See "*Risk Factors—Risks Related to the Notes—Many factors may adversely affect the trading market, value or yield of the Notes*".

Price Stabilization, Short Positions

In connection with the offering, the Initial Purchasers may purchase and sell the Notes in the open market. These transactions may include short sales, purchases on the open market to cover positions created by short sales and stabilizing transactions. Short sales involve the sale by the Initial Purchasers of a greater principal amount of Notes than they are required to purchase in the offering. The Initial Purchasers must close out short position by purchasing Notes in the open market. A short position is more likely to be created if the Initial Purchasers are concerned that there may be downward pressure on the price of the Notes in the open market after pricing that could adversely affect investors who purchase in the offering.

The Initial Purchasers also may impose a penalty bid. This occurs when a particular Initial Purchaser repays to the Initial Purchasers a portion of the underwriting discount received by it because the representative has repurchased notes sold by or for the account of such Initial Purchaser in stabilizing or short covering transactions.

Any of these activities may cause the prices of the Notes to be higher than the price that otherwise would exist in the open market in the absence of such transactions. These transactions may be effected in any over-the-counter market, and, if commenced, may be discontinued at any time.

Neither the Issuer, the Guarantor nor any of the Initial Purchasers make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of the Notes. In addition, neither the Issuer, the Guarantor nor any of the Initial Purchasers make any representation that the Representative will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Settlement

We expect that delivery of the Notes will be made against payment therefor on or about the closing date specified on the cover page of this offering memorandum (the "Settlement Date"), which will be the fifth New York business day following the date of pricing of the Notes of this offering (this settlement cycle being referred to as "T+5"). Under Rule 15c6-1 of the Securities Exchange Act of 1934, trades in the secondary market generally are required to settle in two New York business days, unless the parties to any such trade expressly agree otherwise. Accordingly, purchasers who wish to trade Notes prior to the second business day preceding the Settlement Date will be required, by virtue of the fact that the Notes initially will settle in T+5, to specify an alternative settlement cycle at the time of any such trade to prevent a failed settlement. Purchasers of Notes who wish to trade Notes prior to the second business day preceding the Settlement Date should consult their own adviser.

Other Relationships

Some of the Initial Purchasers and their affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with the Issuer, the Guarantor or their respective affiliates. They have received, or may in the future receive, customary fees and commissions for these transactions.

The Initial Purchasers and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities.

In addition, in the ordinary course of their business activities, the Initial Purchasers and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of the Issuer, the Guarantor or their respective affiliates. Certain of the Initial Purchasers or their affiliates that have a lending relationship with us routinely hedge, certain other of the Initial Purchasers or their affiliates currently hedge and are likely to hedge in future, and certain other of those Initial Purchasers or their affiliates may hedge, their credit exposure to us consistent with their customary risk management policies. Typically, such Initial Purchasers and their affiliates would hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in our securities, including potentially the Notes offered hereby. Any such credit default swaps or short positions could adversely affect future trading prices of the Notes offered hereby. The Initial Purchasers and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Selling Restrictions

General

No action has been or will be taken in any jurisdiction that would permit a public offering of the Notes, or the possession, circulation or distribution of this offering memorandum, or any amendment or supplement to this offering memorandum, or any other offering or publicity material relating to the Notes, in any country or jurisdiction where, or in any circumstances in which, action for that purpose is required. Accordingly, the Notes may not be offered or sold, directly or indirectly, and neither this offering memorandum nor any other offering material or advertisements in connection with the Notes may be distributed or published, in or from any country or jurisdiction except under circumstances that will result in compliance with applicable laws and regulations. Each Initial Purchaser has agreed that it will, to the best of its knowledge, comply with all relevant laws, regulations and directives in each jurisdiction in which it purchases, offers, sells or delivers Notes or has in its possession or distributes this offering memorandum and none of the Issuer, the Guarantor or any other Initial Purchaser shall have any responsibility therefor.

United States

The Initial Purchasers propose to offer the Notes for resale in transactions not requiring registration under the Securities Act or applicable state securities laws, including sales pursuant to Rule 144A. Each Initial Purchaser has represented, warranted and agreed that it will offer and sell the Notes only:

(i) to persons whom it reasonably believes are QIBs pursuant to Rule 144A in transactions meeting the requirements of Rule 144A, or

(ii) to, or for the account or benefit of, persons other than "U.S. persons" (within the meaning of Regulation S under the Securities Act) purchasing in offshore transactions outside the United States within the meaning of Regulation S under the Securities Act.

Any offer or sale of the Notes in the United States in reliance on Rule 144A or another exemption from the registration requirements of the Securities Act will be made by broker-dealers who are registered as such under the Exchange Act.

Canada

The Notes may be sold in Canada only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the Notes must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this offering memorandum (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the Initial Purchasers are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

Hong Kong

Each Initial Purchaser has represented, warranted and agreed that (a) it has not offered and sold, and will not offer or sell, in Hong Kong, by means of any document, any Notes (except for Notes which are a "structured product" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong ("SFO")) other than (i) to persons whose ordinary business it is to buy or sell shares or debentures, whether as principal or agent, or (ii) in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap. 32) of Hong Kong ("CO") or (iii) to "professional investors" within the meaning of the SFO and any rules made under the SFO, or (iv) in other circumstances which do not result in the document being a "prospectus" within the meaning of the CO; and (b) it has not issued, or had in its possession for the purposes of issue, and will not issue, or have in its possession for the purpose of issue (in each case whether in Hong Kong or elsewhere), any advertisement, invitation or document relating to the Notes, which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to Notes which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" within the meaning of the SFO and any rules made under the SFO.

Japan

Each Initial Purchaser has represented, warranted and agreed that the Notes have not been and will not be registered under the Financial Instruments and Exchange Act of Japan (Act No. 25 of 1948, as amended, the "Financial Instruments and Exchange Act") and that it will not offer or sell any Notes, directly or indirectly, in Japan or to, or for the benefit of, any Japanese person or to others, for re-offering or resale, directly or indirectly, in Japan or to any Japanese person, except in each case pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Act and any other applicable laws and regulations of Japan. For purposes of this paragraph, "Japanese person" means any person resident in Japan, including any corporation or other entity organized under the laws of Japan.

Singapore

This offering memorandum has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this offering memorandum and any other document or material in connection with the offering or sale, or invitation for subscription or purchase, of the Notes may not be circulated or distributed, nor may the Notes be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to Initial Purchasers in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA"), (ii) to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the Notes are subscribed or purchased under Section 275 by a relevant person which is: (a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor, securities (as defined in Section 239(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within 6 months after that corporation or that trust has acquired the Notes pursuant to an offer made under Section 275 of the SFA except: (1) to an institutional investor or to a relevant person defined in Section 275(2) of the SFA, or any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA; (2) where no consideration is or will be given for the transfer; (3) where the transfer is by operation of law; (4) as specified in Section 276(7) of the SFA; or (5) as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

Switzerland

The Notes may not be publicly offered, sold or advertised, directly or indirectly, in, into or from Switzerland and will not be listed on the SIX Swiss Exchange or on any other stock exchange or regulated trading facility in Switzerland. Neither this offering memorandum nor any other offering or marketing material relating to the Notes constitutes a prospectus as such term is understood pursuant to article 652a or article 1156 of the Swiss Code of Obligations or a listing prospectus within the meaning of the listing rules of the SIX Swiss Exchange or the rules of any other stock exchange or regulated trading facility in Switzerland, and neither this offering memorandum nor any other offering or marketing material relating to the Notes may be publicly distributed or otherwise made publicly available in Switzerland.

Taiwan

The Notes have not been and will not be registered with the Financial Supervisory Commission of Taiwan, the Republic of China (''Taiwan''), pursuant to relevant securities laws and regulations and may not be offered or sold in Taiwan through a public offering or in any manner which would constitute an offer within the meaning of the Securities and Exchange Act of Taiwan or would otherwise require registration with or the approval of the Financial Supervisory Commission of Taiwan. No person or entity in Taiwan has been authorized to offer or sell the Notes in Taiwan.

United Kingdom

Each Initial Purchaser has represented, warranted and agreed that:

(i) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000 ("FSMA")) received by it in connection with the issue or sale of the Notes in circumstances in which section 21(1) of the FSMA does not apply to the Issuer or the Guarantor; and

(ii) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the Notes in, from or otherwise involving the United Kingdom.

The Netherlands

Each Initial Purchaser has represented, warranted and agreed that it has not offered or sold and will not offer or sell any of the Notes in the Netherlands, unless it has the Dutch regulatory capacity to do so, other than through one or more investment firms acting as principals and having the Dutch regulatory capacity to make such offers or sales.

Each Initial Purchaser has represented, warranted and agreed that it will not make an offer of Notes to the public in The Netherlands in reliance on Article 3(2) of the Prospectus Directive unless:

(i) such offer is made exclusively to legal entities which are qualified investors (as defined in the Dutch Financial Markets Supervision Act (*Wet op het financieel toezicht* ("Wft")) in The Netherlands; or

(ii) standard exemption logo and wording are disclosed as required by article 5:20(5) of the Wft; or

(iii) such offer is otherwise made in circumstances in which article 5:20(5) of the Wft is not applicable,

provided that no such offer of Notes shall require the Issuer or any Initial Purchaser to publish a prospectus pursuant to Article 3 of the Prospectus Directive or supplement a prospectus pursuant to Article 16 of the Prospectus Directive.

For the purposes of this provision, the expressions (i) an "offer of Notes to the public" in relation to any Notes in The Netherlands; and (ii) "Prospectus Directive", have the meaning given to them below in the paragraph headed with "*European Economic Area*".

European Economic Area

In relation to each Member State of the EEA, each initial purchaser has represented and agreed that it has not made and will not make an offer of Notes to the public in that Member State except that it may make an offer of Notes, which are the subject of the offering contemplated by this offering memorandum, to the public in that Member State other than:

(a) to any legal entity which is a qualified investor as defined in the Prospectus Directive;

(b) to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the relevant Initial Purchaser or Initial Purchasers nominated by the Issuer for any such offer; or

(c) in any other circumstances falling within Article 3(2) of the Prospectus Directive,

provided that no such offer of Notes shall require the Issuer, the Guarantor or any Initial Purchasers to publish a prospectus pursuant to Article 3 of the Prospectus Directive or supplement a prospectus pursuant to Article 16 of the Prospectus Directive, in each case, in relation to such offer. Neither the Issuer nor the Guarantor nor the Initial Purchasers have authorized, nor do they authorize, the making of any offer of Notes in circumstances in which an obligation arises for the Issuer, the Guarantor or the Initial Purchasers to publish or supplement a prospectus for such offer.

For the purposes of this provision, the expression an "offer of Notes to the public" in relation to any Notes in any Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe the Notes, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State and the expression "Prospectus Directive" means Directive 2003/71/EC (as amended by Directive 2010/73/EU), and includes any relevant implementing measure in the Member State.

This EEA selling restriction is in addition to any other selling restrictions set out in this offering memorandum.

TRANSFER RESTRICTIONS

Offers and Sales

The Notes have not been and will not be registered under the Securities Act and may not be offered or sold in the United States except pursuant to an effective registration statement or (i) in a transaction not subject to the registration requirements under the Securities Act and any securities regulatory authority of any state of the United States or (ii) in accordance with an applicable exemption from the registration requirements thereof. Accordingly, the Notes are being offered and sold hereunder only:

- inside the United States or to U.S. persons (as defined under Regulation S), to QIBs; and
- outside the United States to non-U.S. persons or for the account or benefit of non-U.S. persons, in offshore transactions in reliance upon Regulation S.

Any offer or sale of the Notes in the United States in reliance on Rule 144A or another exemption from the registration requirements of the Securities Act will be made by broker-dealers who are registered as such under the Exchange Act.

Until the expiration of 40 days after the later of the commencement of the offering of the Notes and the original issue or sale date of the Notes, an offer or sale of the Notes within the United States by a dealer may violate the registration requirements of the Securities Act if such offer or sale is made otherwise than pursuant to an exemption from registration under the Securities Act.

Each purchaser of the Notes will be deemed by its acceptance of the Notes to have represented, warranted and agreed that it is purchasing the Notes for its own account, or for one or more investor accounts for which it is acting as a fiduciary or agent, in each case for investment, and not with a view to, or for offer or sale in connection with, any distribution thereof in violation of the Securities Act or any state securities laws, subject to any requirement of law that the disposition of its property or the property of such investor account or accounts be at all times within its or their control and subject to its or their ability to resell such Notes pursuant to Rule 144A, Regulation S or any other exemption from registration available under the Securities Act.

Rule 144A Global Notes

Each purchaser of Notes within the United States will be deemed by its acceptance of the Notes to have represented, warranted and agreed on its behalf and on behalf of any investor accounts for which it is purchasing the Notes, that neither the Issuer nor the Guarantor nor the Initial Purchasers, nor any person acting on their behalf, has made any representation to it with respect to the offering or sale of any Notes, other than the information contained in this offering memorandum, which offering memorandum has been delivered to it and upon which it is solely relying in making its investment decision with respect to the Notes, has had access to such financial and other information concerning Deutsche Telekom, Finance and the Notes as it has deemed necessary in connection with its decision to purchase any of the Notes, and that:

(i) the purchaser is not an affiliate of Deutsche Telekom or Finance or a person acting on behalf of Deutsche Telekom or Finance or on behalf of such affiliate; and it is not in the business of buying and selling securities or, if it is in such business, it did not acquire the Notes from Deutsche Telekom or Finance or an affiliate thereof in the initial distribution of the Notes;

(ii) the purchaser acknowledges that the Notes have not been and will not be registered under the Securities Act or with any securities regulatory authority of any state of the United States and are subject to significant restrictions on transfer;

(iii) the purchaser (i) is a QIB, (ii) is aware that the sale to it is being made in reliance on Rule 144A or another exemption from, or in a transaction not subject to, the registration requirements of the Securities Act, and (iii) is acquiring such Notes for its own account or for the account of a QIB, in each case for investment and not with a view to, or for offer or sale in connection with, any resale or distribution of the Notes in violation of the Securities Act or any state securities laws;

(iv) the purchaser is aware that the Notes are being offered in the United States in a transaction not involving any public offering in the United States within the meaning of the Securities Act;

(v) if, prior to the date that is one year after the later of the date (the "Resale Restriction Termination Date") of the commencement of sales of the Notes and the last date on which the Notes were acquired from the Issuer or any of the Issuer's affiliates in the offering the purchaser decides to offer, resell, pledge or otherwise transfer such Notes, such Notes may be offered, sold, pledged or otherwise transferred only (i) to a person whom the beneficial owner and/or any person acting on its behalf reasonably believes is a QIB in a transaction meeting the requirements of Rule 144A, (ii) in accordance with Regulation S, (iii) in accordance with Rule 144 (if available), (iv) in accordance with an effective registration statement under the Securities Act, or (v) pursuant to any other available exemption from the registration requirements of the Securities Act in each case in accordance with any applicable securities laws of any state of the United States or any other jurisdiction and agrees to give any subsequent purchaser of such Notes notice of any restrictions on the transfer thereof;

(vi) the Notes have not been offered to it by means of any general solicitation or general advertising;

(vii) the Notes are "restricted securities" within the meaning of Rule 144(a)(3) under the Securities Act and no representation is made as to the availability of the exemption provided by Rule 144 under the Securities Act for resales of any such Notes;

(viii) the Notes, unless otherwise determined by the Issuer in accordance with applicable law, will bear a legend to the following effect:

THIS SECURITY HAS NOT BEEN AND WILL NOT BE REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR ANY STATE SECURITIES LAW. THE HOLDER HEREOF, BY PURCHASING THIS SECURITY, (A) REPRESENTS THAT IT IS A "QUALIFIED INSTITUTIONAL BUYER" (AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT) AND (B) AGREES THAT THIS SECURITY MAY BE REOFFERED, RESOLD, PLEDGED OR OTHERWISE TRANSFERRED ONLY IN COMPLIANCE WITH THE SECURITIES ACT AND OTHER APPLICABLE LAWS AND ONLY (1) TO DEUTSCHE TELEKOM INTERNATIONAL FINANCE B.V. (THE "ISSUER"), (2) PURSUANT TO RULE 144A UNDER THE SECURITIES ACT ("RULE 144A") TO A PERSON THAT THE HOLDER REASONABLY BELIEVES IS A QUALIFIED INSTITUTIONAL BUYER WITHIN THE MEANING OF RULE 144A PURCHASING FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF A QUALIFIED INSTITUTIONAL BUYER WHOM THE HOLDER HAS INFORMED, IN EACH CASE, THAT THE REOFFER, RESALE, PLEDGE OR THE TRANSFER IS BEING MADE IN RELIANCE ON RULE 144A, (3) IN AN OFFSHORE TRANSACTION IN ACCORDANCE WITH RULE 903 OR RULE 904 OF REGULATION S UNDER THE SECURITIES ACT, (4) PURSUANT TO AN EXEMPTION FROM REGISTRATION IN ACCORDANCE WITH RULE 144 UNDER THE SECURITIES ACT (IF AVAILABLE), OR (5) PURSUANT TO ANOTHER EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT, PROVIDED THAT, AS A CONDITION TO THE REGISTRATION OF THE TRANSFER HEREOF, THE ISSUER OR THE FISCAL AGENT MAY REQUIRE THE DELIVERY OF ANY DOCUMENTS, INCLUDING AN OPINION OF COUNSEL, THAT IT, IN ITS SOLE DISCRETION, MAY DEEM NECESSARY OR APPROPRIATE TO EVIDENCE COMPLIANCE WITH SUCH EXEMPTION. THE HOLDER HEREOF, BY, PURCHASING OR ACCEPTING THIS SECURITY, REPRESENTS AND AGREES FOR THE BENEFIT OF THE ISSUER THAT IT WILL NOTIFY ANY PURCHASER OF THIS SECURITY FROM THE HOLDER OF THE RESALE RESTRICTIONS REFERRED TO ABOVE.

(ix) the purchaser agrees that it will give to each person to whom it transfers the Notes notice of any restrictions on transfer of such Notes; and

(x) the purchaser acknowledges that the Fiscal Agent will not be required to accept for registration of transfer any Notes except upon presentation of evidence satisfactory to the Issuer and the Fiscal Agent that the restrictions set forth herein have been complied with.

Terms defined in Rule 144A shall have the same meaning when used in the foregoing sections (i)-(x). Each purchaser acknowledges that the Issuer, the Guarantor and the Initial Purchasers will rely upon the truth and accuracy of the foregoing acknowledgements, representations and agreements, and agrees that if any of the acknowledgements, representations or warranties deemed to have been made by such purchaser by its purchase of Notes are no longer accurate, it shall promptly notify the Issuer, the Guarantor and the Initial Purchasers; if they are acquiring any Notes offered hereby as a fiduciary or agent for one or more investor accounts, each purchaser represents that they have sole investment discretion with respect to each such account and full power to make the foregoing acknowledgements, representations and agreements on behalf of each such account.

The Issuer and the Guarantor recognize that none of DTC, Euroclear nor Clearstream in any way undertakes to, and none of DTC, Euroclear nor Clearstream have any responsibility to, monitor or ascertain the compliance of any transactions in the Notes with any exemptions from registration under the Securities Act or any other state or federal securities law.

Regulation S Global Notes

Each purchaser of Notes outside the United States pursuant to Regulation S will be deemed by its acceptance of the Notes to have represented, warranted and agreed, on its behalf and on behalf of any investor accounts for which it is purchasing the Notes, that neither the Issuer nor the Guarantor nor the Initial Purchasers, nor any person acting on their behalf, has made any representation to it with respect to the offering or sale of any Notes, other than the information contained in this offering memorandum, which offering memorandum has been delivered to it and upon which it is solely relying in making its investment decision with respect to the Notes, has had access to such financial and other information concerning Deutsche Telekom and the Notes as it has deemed necessary in connection with its decision to purchase any of the Notes, and that:

(i) the purchaser understands and acknowledges that the Notes have not been and will not be registered under the Securities Act, or with any securities regulatory authority of any state of the United States, and may not be offered, sold or otherwise transferred except in compliance with the registration requirements of the Securities Act or any other applicable securities law, pursuant to an exemption therefrom or in any transaction not subject thereto;

(ii) the purchaser, and the person, if any, for whose account or benefit the purchaser is acquiring the Notes, is not a U.S. person and is acquiring the Notes in an “offshore transaction” meeting the requirements of Regulation S and was located outside the United States at the time the buy order for the Shares was originated and continues to be outside of the United States and has not purchased the Notes for the account or benefit of any U.S. person or entered into any arrangement for the transfer of the Notes to any U.S. person;

(iii) the purchaser is aware of the restrictions on the offer and sale of the Notes pursuant to Regulation S described in this offering memorandum and agrees to give any subsequent purchaser of such Notes notice of any restrictions on the transfer thereof;

(iv) the Notes have not been offered to it by means of any “directed selling efforts” as defined in Regulation S; and

(v) Deutsche Telekom shall not recognize any offer, sale, pledge or other transfer of the Notes made other than in compliance with the above-stated restrictions.

Terms defined in Regulation S shall have the same meaning when used in the foregoing sections (i)-(v).

Until the 41st day after the later of the commencement of the sale of the Notes and the date of the original issuance of the Notes, the Regulation S notes will bear a restrictive legend to the following effect and may not be transferred otherwise than in accordance with the transfer restrictions set forth in such legend:

THE SECURITIES EVIDENCED HEREBY HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”), OR WITH ANY SECURITIES REGULATORY AUTHORITY OF ANY JURISDICTION AND, ACCORDINGLY, MAY NOT BE REOFFERED, RESOLD, PLEDGED OR OTHERWISE TRANSFERRED WITHIN THE UNITED STATES OR TO OR FOR THE ACCOUNT OR BENEFIT OF A U.S. PERSON (AS DEFINED IN REGULATION S UNDER THE SECURITIES ACT) EXCEPT PURSUANT TO AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT. DEUTSCHE TELEKOM INTERNATIONAL FINANCE B.V. (THE “ISSUER”) HAS AGREED THAT THIS LEGEND SHALL BE DEEMED TO HAVE BEEN REMOVED ON THE 41ST DAY FOLLOWING THE LATER OF THE COMMENCEMENT OF THE OFFERING OF THE SECURITIES AND THE FINAL DELIVERY DATE WITH RESPECT THERETO.

LEGAL MATTERS

The validity of the Notes has been passed upon for us by our United States counsel, Cleary Gottlieb Steen & Hamilton LLP, and for the underwriters by their United States counsel, Sullivan & Cromwell LLP. The validity of the Notes under Dutch law has been passed upon by our Dutch counsel Clifford Chance LLP, Amsterdam.

INDEPENDENT ACCOUNTANTS

The consolidated financial statements of Deutsche Telekom as of and for the years ended December 31, 2017 and 2016, which are incorporated by reference in this offering memorandum, have been prepared in accordance with IFRS as adopted by the European Union and have been audited by PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, Friedrich-Ebert-Anlage 35-37, 60372 Frankfurt am Main, Germany ("PwC"), independent accountants, as stated in its independent auditor's reports incorporated by reference in this offering memorandum. The condensed consolidated interim financial statements as of and for the three month period ended March 31, 2018 have been reviewed by PwC and PwC issued a review report thereon. However, their separate report dated May 9, 2018 incorporated by reference herein states that they did not audit and they do not express an opinion on that unaudited financial information. Accordingly, the degree of reliance on their report on such information should be restricted in light of the limited nature of the review procedures applied. PwC is a member of the German Chamber of Public Accountants (*Wirtschaftsprüferkammer*), Berlin.

The independent auditor's reports of PwC for the consolidated financial statements of the Company as of and for the fiscal years ended December 31, 2017 and 2016 refer to group management reports (*Konzernlageberichte*). Additionally, the review report of PwC on the condensed consolidated interim financial statements of the Company as of and for the three-months period ended March 31, 2018 refers to the interim group management report (*Konzernzwischenlagebericht*). The group management reports and the interim group management report as a whole are not included or incorporated by reference in this offering memorandum. The group management reports and the interim group management report were prepared by and are the sole responsibility of, the Company's management in accordance with German generally accepted accounting principles and with respect to the interim group management report in accordance with the provisions of the German Securities Trading Act (*Wertpapierhandelsgesetz – WpHG*) applicable to interim group management reports. The examinations of and the auditor's reports upon such group management reports are required and were performed in accordance with § 317 of the German Commercial Code (*Handelsgesetzbuch, HGB*), with respect to the interim group management report in accordance with § 115 WpHG, and German generally accepted standards for the audit of management reports promulgated by the German Institut der Wirtschaftsprüfer (IDW). Those examinations were not made in accordance with generally accepted auditing or attestation standards in the United States. Accordingly, PwC does not express any opinion on this information or on the consolidated financial statements or the condensed consolidated interim financial statements incorporated by reference in the offering memorandum, in each case in accordance with U.S. generally accepted auditing standards or U.S. attestation standards. The information contained in such group management reports and the interim group management report and the auditor's reports upon such group management reports and the review report upon such interim group management report should not be relied upon by U.S. investors.

GENERAL INFORMATION

The issuance of the Notes was authorized by a resolutions of the board of managing directors of Finance, dated June 11, 2018. On March 5, 2018, the supervisory board of Finance approved the annual financing plan (*Jahresfinanzplan*) for 2018.

The Notes are guaranteed by Deutsche Telekom (see "*Description of the Notes and Guarantees—Guarantees*"). A resolution of the Board of Management and the Supervisory Board of Deutsche Telekom, dated November 10, 2017, approved the annual financing plan (*Jahresfinanzplan*) for 2018 pursuant to which the Notes are being offered.

This document is an advertisement for the purposes of applicable measures implementing the Prospectus Directive. A prospectus prepared pursuant to the Prospectus Directive is intended to be published, which, when published, can be obtained from the offices of Deutsche Telekom.

Issuer

Deutsche Telekom International Finance B.V.
Stationsplein 8 K
6221 BT Maastricht
The Netherlands

Guarantor

Deutsche Telekom AG
Friedrich-Ebert-Allee 140
53113 Bonn
Germany

Fiscal Agent, Paying Agent, Registrar and Transfer Agent

Citibank, N.A.
Agency & Trust
388 Greenwich Street, 6^{th} Floor
New York, New York 10013
United States of America

Legal Advisers

To the Issuer and Guarantor

As to United States and German law
Cleary Gottlieb Steen & Hamilton LLP
Neue Mainzer Straße 52
60311 Frankfurt am Main
Germany

As to Dutch law
Clifford Chance LLP
Droogbak 1A
1013 GE Amsterdam
The Netherlands

To the Underwriters

As to United States law
Sullivan & Cromwell LLP
Neue Mainzer Straße 52
60311 Frankfurt am Main
Germany

Auditors of Deutsche Telekom AG

PricewaterhouseCoopers
GmbH
Wirtschaftsprüfungsgesellschaft
Friedrich-Ebert-Anlage 35-37
60372 Frankfurt am Main
Germany

Deutsche Telekom International Finance B.V.

$1,200,000,000 4.375% Notes due June 21, 2028
$550,000,000 4.750% Notes due June 21, 2038

Guaranteed as to Payment
of Principal and Interest by

Deutsche Telekom AG

Citigroup
RBC Capital Markets
TD Securities

MUFG
NatWest Markets
Société Générale Corporate & Investment Banking

June 14, 2018