

DEUTSCHE TELEKOM CAPITAL MARKETS DAY 2018



LIFE IS FOR SHARING.

GROUP STRATEGY

TIMOTHEUS HÖTTGES

WHAT DRIVES US...



DEDICATED NETWORK INVESTMENT



FOCUSED PORTFOLIO APPROACH & CAPITAL ALLOCATION



PASSION FOR CUSTOMER EXPERIENCE



BEST-OF-BREED TEAM WITH ENTREPRENEURIAL SPIRIT



LEADERSHIP & WINNING MENTALITY



WALK THE TALK

...TURNED DT INTO A GROWTH COMPANY

REVIEW 2014 – 2018

GROUP STRATEGY

GERMANY

SYSTEMS SOLUTIONS

TECHNOLOGY & INNOVATION

T-MOBILE US

EUROPE

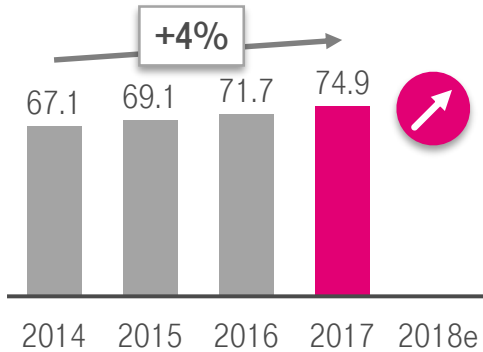
GROUP DEVELOPMENT

FINANCE

GROWTH ABOVE COMMITMENTS

Revenue (organic)¹

€ bn



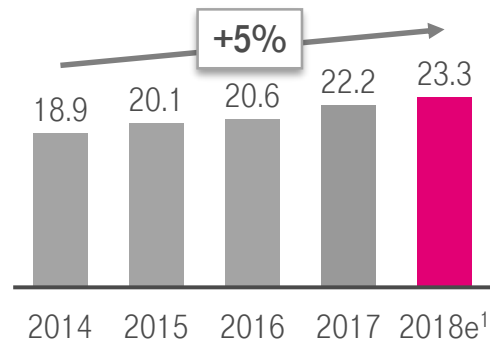
CMD AMBITION 2014–2018:

CAGR +1–2%



Adj. EBITDA (organic)¹

€ bn



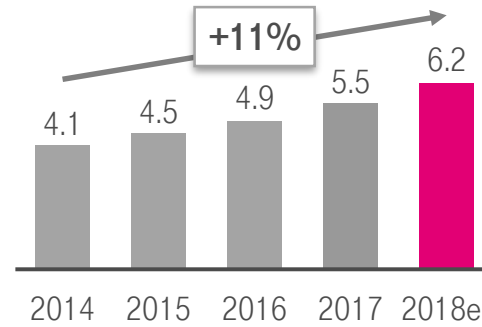
CMD AMBITION 2014–2018:

CAGR +2–4%



FCF²

€ bn



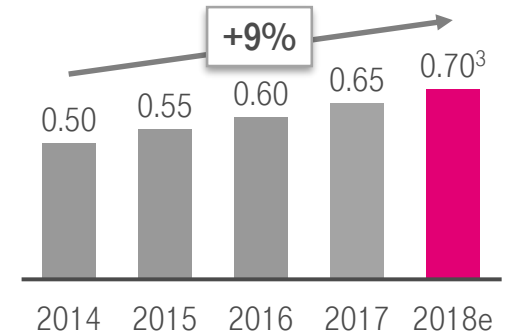
CMD AMBITION 2014–2018:

CAGR +10%



Dividend per share

€



CMD AMBITION 2014–2018:

FOLLOW FCF



CAGR

¹ Based on constant exchange rates (Average exchange rate 2017 of €1 = US\$1.13); revenue and adj. EBITDA corrected for handset lease

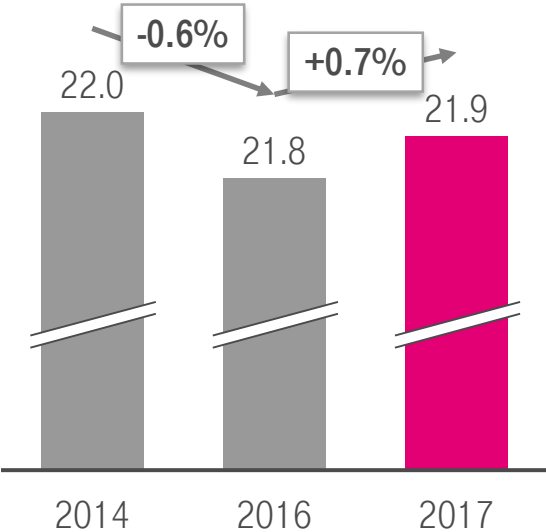
² Before dividend payments & spectrum invest

³ Subject to necessary AGM approval and board resolution

GROWTH PROFILE ACROSS OUR FOOTPRINT...

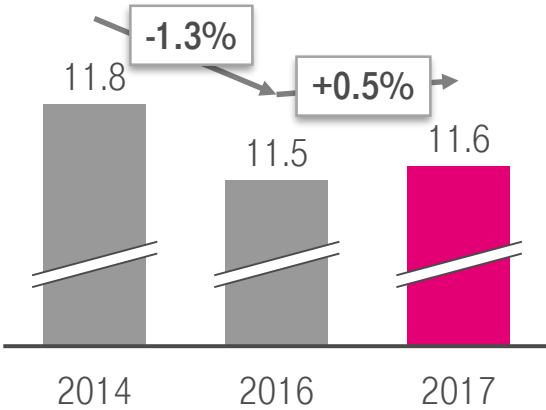
Germany revenue

Excl. DFMG,
€ bn



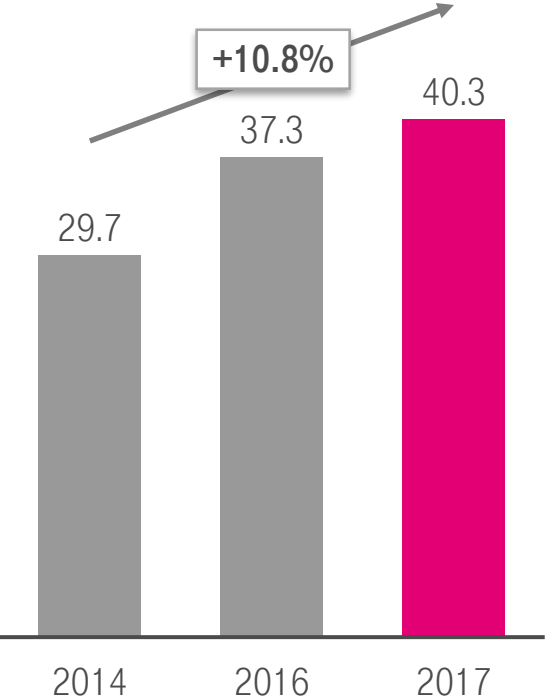
Europe revenue

Organic,
€ bn



TMUS revenue

\$ bn



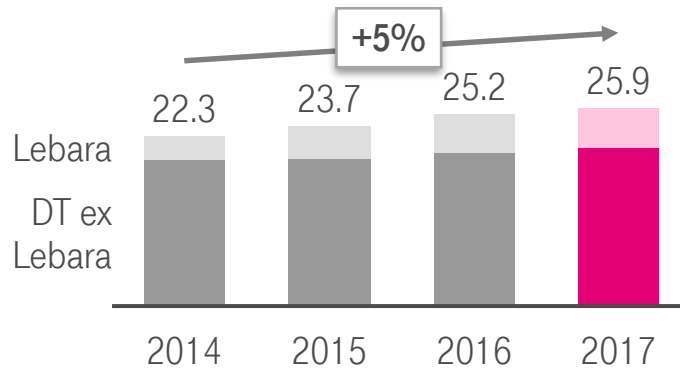
CAGR

...SUPPORTED BY CONTRACT CUSTOMER GROWTH

Germany



Mobile postpaid customers, mn

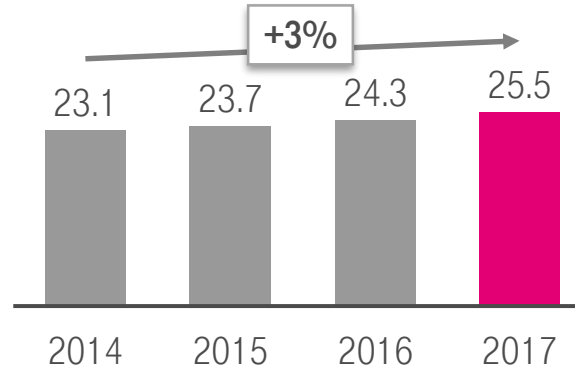


Customer growth in line w/fair share

Europe



Mobile postpaid customers (excl TMNL), mn

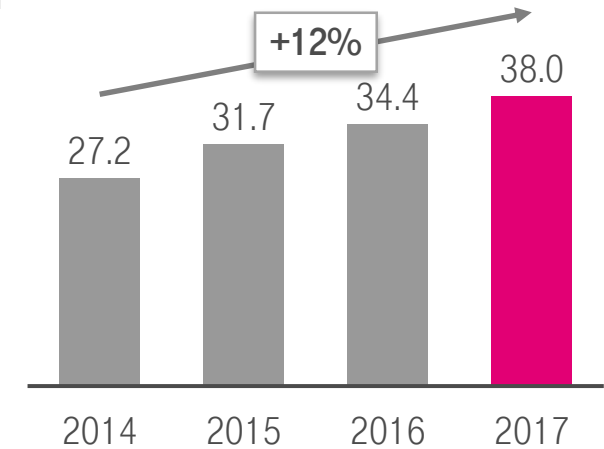


Customer growth in line w/fair share since 2017

TMUS



Mobile postpaid customers, mn



Customer growth well above fair share



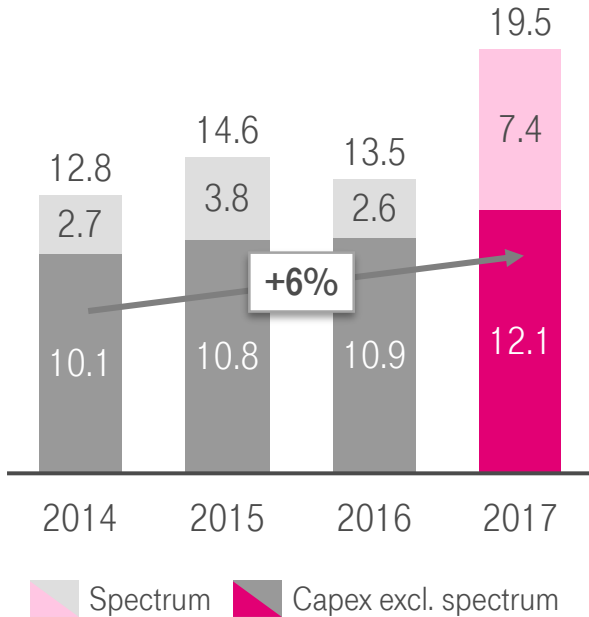
'FRONT BOOK ≈ BACK BOOK' REDUCING RISK

CAGR

INVEST FOR SUSTAINED GROWTH MOMENTUM

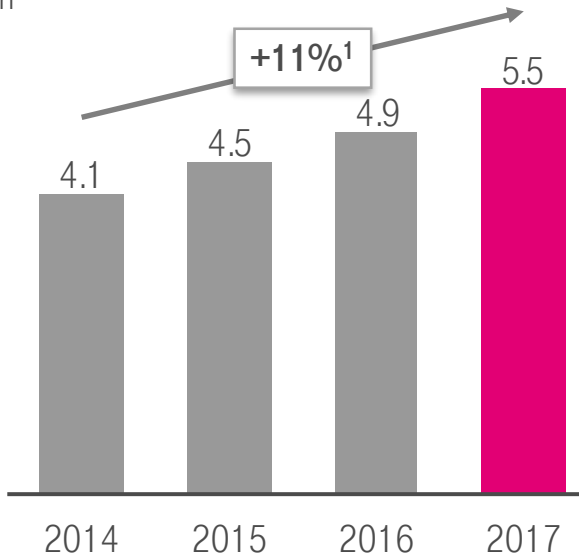
We heavily invested in the past...

Group Cash Capex¹,
€ bn



...while delivering strongly on FCF...

Group FCF²,
€ bn



...and creating the basis for future growth



Germany

- 94% LTE Pop coverage (2017)
- ≈ 80% HH vectoring coverage (2019e)³



Europe

- 94% LTE Pop coverage (2017)
- 8/11 NatCos with “Best in Test” network



TMUS

- Leading low band spectrum position
- LTE rollout to > 320 mn Pop

Others

- Innovation (e.g. Edge Computing, 5G)
- TSI: IoT & Security scale-up

CAGR

¹ Based on constant exchange rates (Average exchange rate 2017 of €1 = US\$1.13)

² Before dividend payments & spectrum invest

³ Delayed due to long regulatory process

WINNING MENTALITY: “BRING ME AWARDS”

Network



Customer Service & Satisfaction



Brand

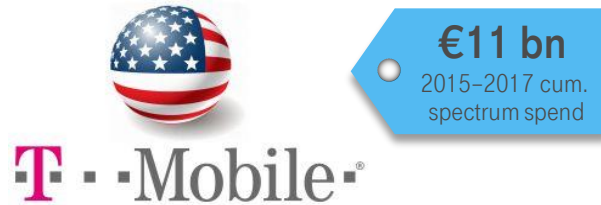


Products & Company



PORTFOLIO: DISCIPLINED CAPITAL ALLOCATION

Invest in footprint



Consolidate towards FMC



Invest in innovation



Buy out minorities



Divest non-core activities



Risk situation stabilized



WE HAVE KEPT OUR PROMISES...

KEY FINANCIALS

Ambition level 2018

- Group Revenue CAGR +1–2% (2014–2018)
- Group Adj. EBITDA CAGR +2–4% (2014–2018)
- Group FCF CAGR \approx +10% (2014–2018)
- Group ROCE > WACC in 2018
- Group Cash CAPEX CAGR +1–2% (2014–2018)
- Group Adj. OPEX decrease (2014–2018)

- Following FCF growth; min. DPS of €0.50 p.a.

Achievements 2017

- +4% CAGR (2014–2017)
- +6% CAGR (2014–2017)
- +11% CAGR (2014–2017)
- ROCE > WACC in 2017
- +6% CAGR (2014–2017)
- €0.7 bn indirect cost decrease vs. 2014

- €0.65

Delivered/on track



SHAREHOLDER REMUNERATION (2015–2018)

¹ Compared to target of €1.8 bn

...AND HAVE LEARNED ALONG THE JOURNEY



Key learnings

- ✓ Convergence works, our customers love it
- ✓ Dialogue marketing is a must
- ✓ Network leadership pays off
- ✓ M&A is a valid lever for growth
- ✓ The last 1% is the toughest (e.g. All-IP)
- ✓ People make the difference

STRATEGY 2018 – 2021

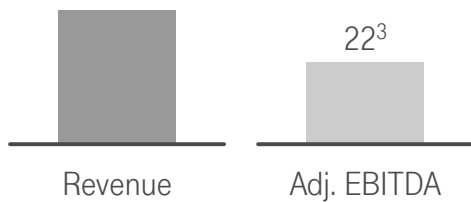
LEADING TELCO ON BOTH SIDES OF THE ATLANTIC...

Strong presence in US and Europe...

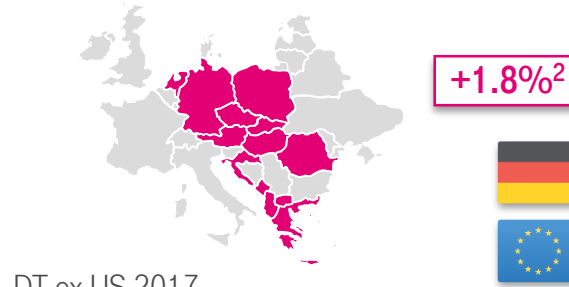
Market growth 2017 vs 2016



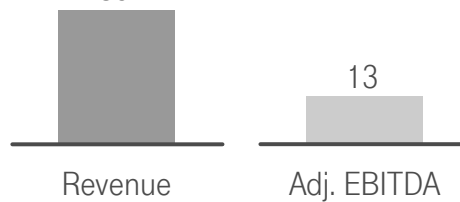
TMUS & Sprint pro forma 2017,
\$ bn



127 mn mobile customers **+6.9 mn⁴**



DT ex US 2017,
€ bn



96 mn mobile customers **+2.3 mn⁴**

19 mn broadband lines **+0.5 mn**

7 mn TV customers **+0.5 mn**

XX = 2017 vs. 2016

¹ Total mobile revenue ² Total integrated revenue ³ Pro forma revenue and adjusted EBITDA as of FY 2017; Calculated as the sum of T-Mobile US and Sprint revenue/adjusted EBITDA (as per respective company reporting)

⁴ FY 2017 total net adds (incl. wholesale); U.S. includes 5.7 mn and 1.2 mn net adds for T-Mobile US and Sprint, respectively; T-Mobile US net adds adjusted for wholesale customers restatement

...with significant value creation

- ✓ Presence in two strongest economies in Western Hemisphere
- ✓ 90% of revenues in AAA economies
- ✓ Well-balanced growth & yield profile
- ✓ Local entrepreneurship & global scale
- ✓ High relevance for local economies

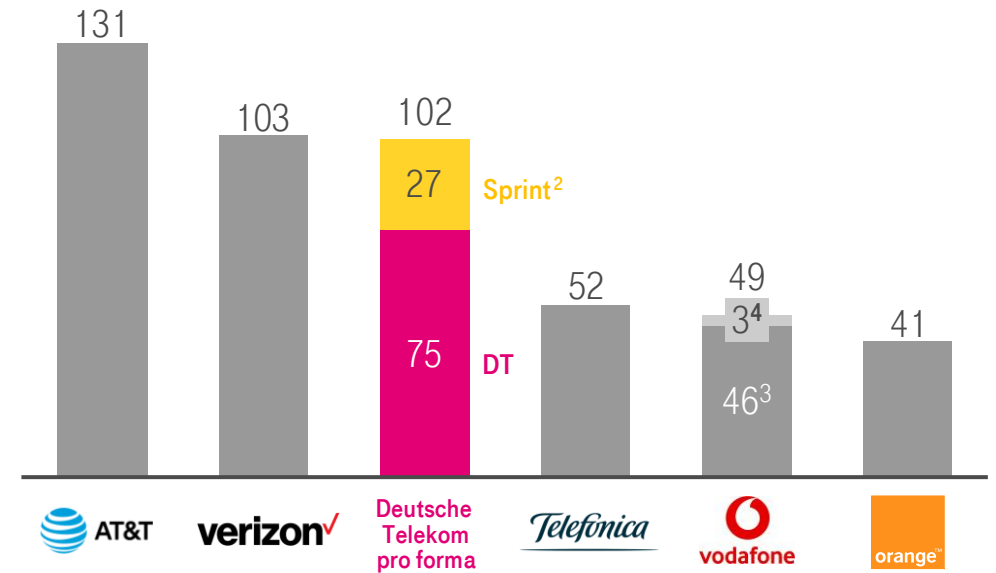
...WITH AN EVEN STRONGER POSITION POST US DEAL

Attractive TMUS/Sprint deal terms

- ✓ Unique value creation opportunity for DT shareholders
- ✓ Attractive transaction terms
- ✓ Benefitting US consumers, investments & job creation
- ✓ Governance designed for efficient integration
- ✓ Robust capital structure

DT's global position strengthened

Reported Revenue 2017¹,
€ bn



Source: Company information

¹ \$-denominated figures converted in € based on exchange rate as of April 20th, 2018 (€1 = US\$1.22745)

² Based on Sprint FY 2017 reported revenue, converted in €

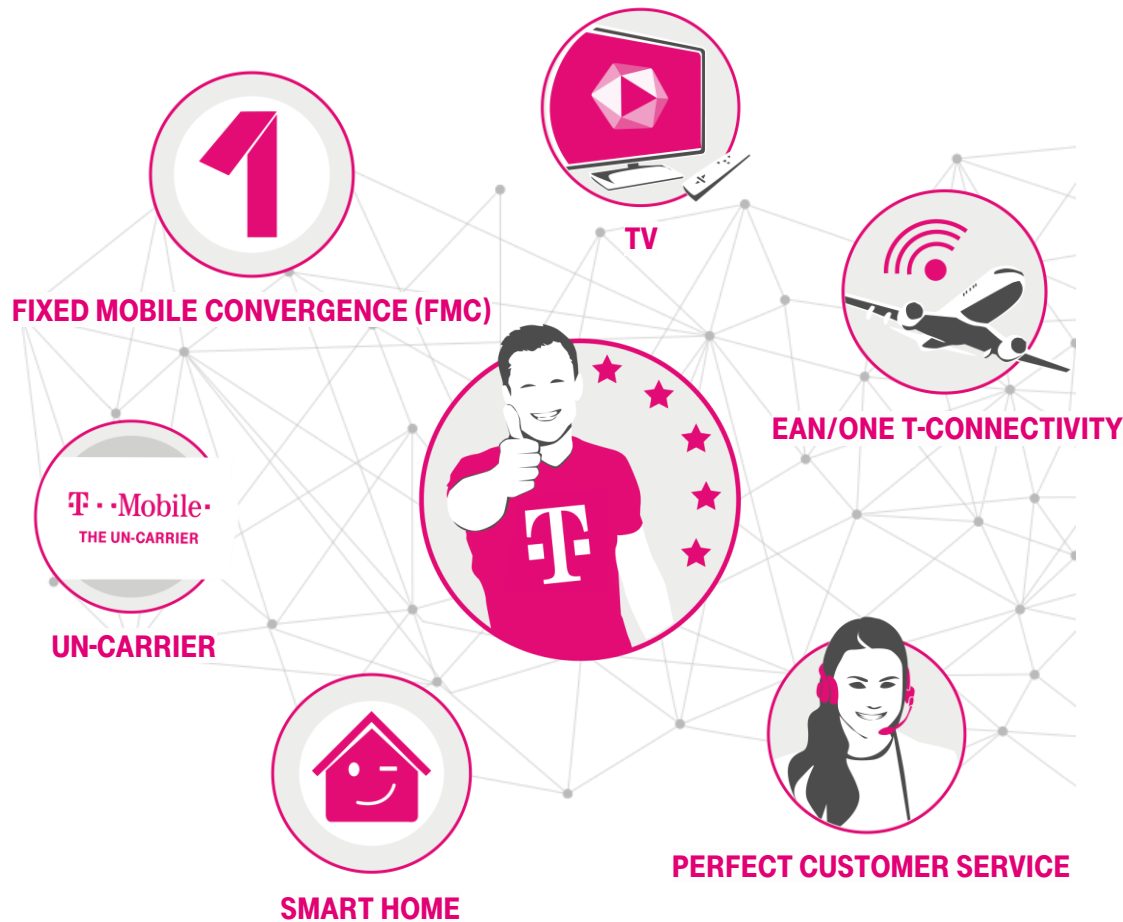
³ LTM as of Sep. 2017 and excluding Netherlands operations in H2 FY 2016/17

⁴ Additional revenue from newly acquired Liberty assets in Germany, Czech Republic, Hungary & Romania

FUTURE GROWTH IS FUELED BY THREE MAIN PILLARS



WE LEAD IN CUSTOMER EXPERIENCE AND IMPROVE CONTINUOUSLY

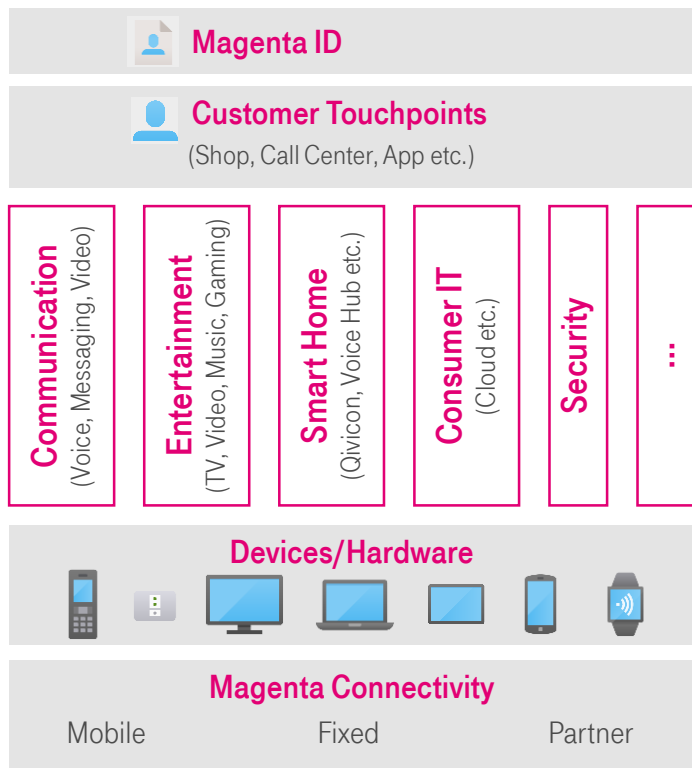


Our proof points

- ✓ We provide **one seamless T-connectivity**:
Connect App, European Aviation Network
- ✓ We offer the leading **FMC** proposition:
+1.5 mn FMC customers in our integrated footprint (FY 2017)
- ✓ We are **“The Un-Carrier”** in the US:
+11% post-paid customers in 2017
- ✓ We have made it to the living rooms with simple, modular products:
TV, Smart Home, Smart Speaker
- ✓ Our **customer service** is continuously improving:
Decreased no-shows in Germany by 33% (FY 2017)

MAGENTA 1: OUR UNIQUE CONVERGENCE OFFER

More than a tariff...



Seamless customer experience

- Magenta ID as single identifier
- Omni-channel customer journey

Seamless products & services

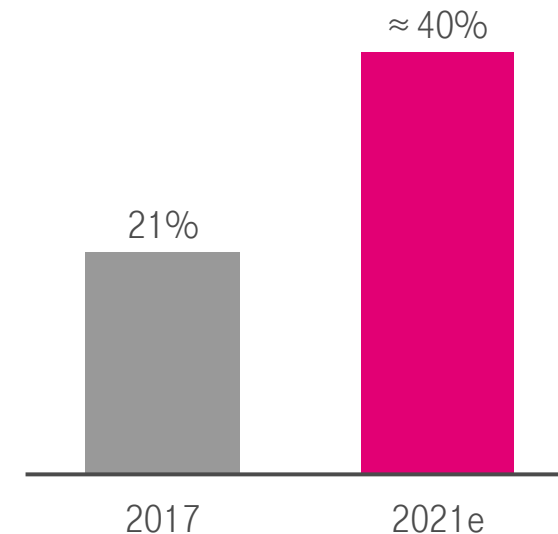
- Comprehensive portfolio positioned in the living room
- Integration across devices

Seamless connectivity

- Access agnostic
- Make, buy and partner

...and resonating with customers

FMC HH penetration in Germany and Europe (blended)
(FMC HHs/fixed broadband base)



WE STRIVE FOR PERFECT CUSTOMER SERVICE

We treat service as a key differentiator...



DER SERVICE

- ✓ Dedicated organization with > 30,000 employees for E2E responsibility of customer service
- ✓ One touch self service ability and personalized customer care with "Mein Magenta App"¹
- ✓ Predictive maintenance to fix problems before they arise



TEAM OF EXPERTS (TEX)

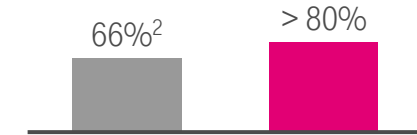
- ✓ Own P&L responsibility for dedicated teams
- ✓ Very high "Care NPS" (+9 pts. yoy 2017) at very low costs per account (-13% yoy 2017)
- ✓ Focus for 2018: global care to ensure 24/7 best customer experience

¹ Formerly MagentaSERVICE App ² Q1 2018

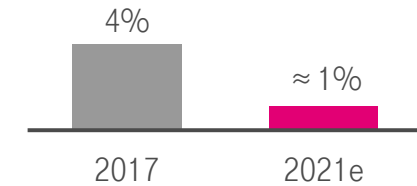
...reflected in our high ambitions



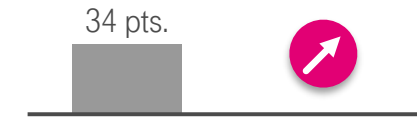
Contact resolution within 24h



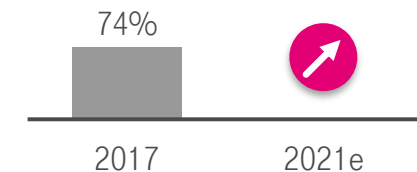
Rate of complaints



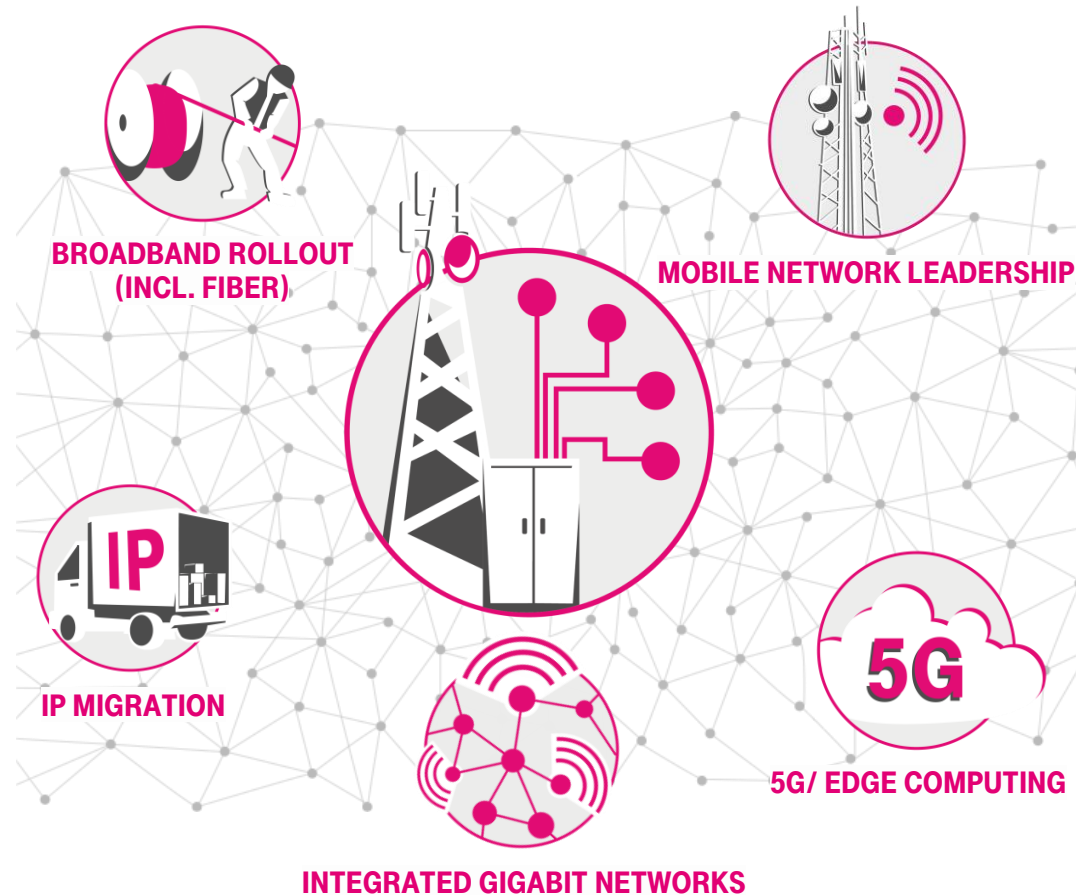
Net promoter score



Customer service satisfaction



WE ARE “DEDICATED NETWORK INVESTORS”



¹ Bandwidth ≥ 50 Mbps, delayed due to regulatory decisions

Our proof points

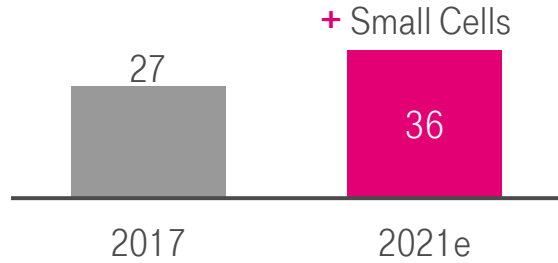
- ✓ **We own extended fiber backbone in our european footprint:** Key asset for **integrated Gigabit networks**
- ✓ **We roll out broadband for the masses:** ≈ 80% HH coverage with vectoring in 2019 (≈ 62% in 2018)¹
- ✓ **We push the fiber rollout:** Already more than 455,000 km fiber deployed in Germany, 240,000 km in our EU footprint
- ✓ **We enable real-time networks: IP migration** completed in 5 EU NatCos, 75 k BNG access nodes migrated in Germany in 2017
- ✓ **We provide leading mobile network quality:** Winner of all relevant network tests (e.g. Connect, P3, Opensignal)
- ✓ **We drive network innovation with 5G and Edge Computing:** 600 MHz rollout started in US, MobileEdgeX launched

MOBILE NETWORK LEADERSHIP EVERYWHERE

Germany



Macro cell sites,
k



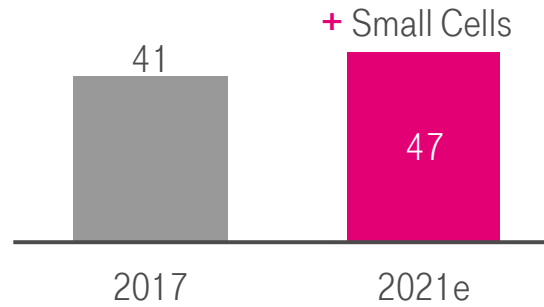
Strengthen leadership position (incl. 5G) & enable new use cases (e.g. IoT, FWA)



Europe



Macro cell sites,
k



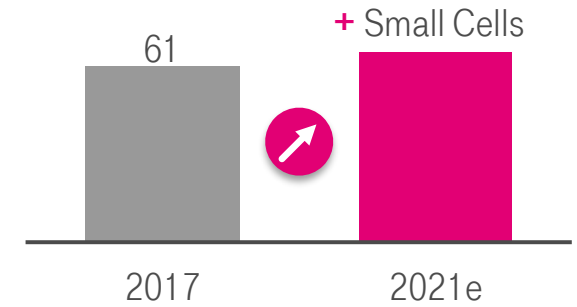
Build on strong fiber footprint to lead in 5G & maintain growth momentum



TMUS



Macro cell sites,
k

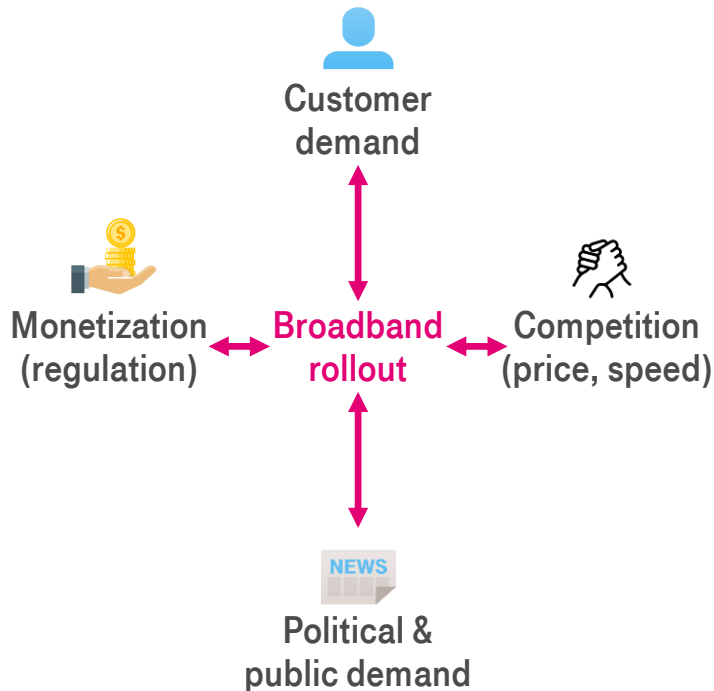


Extend network capacity & density to pave way for 5G



PUSHING FIBER ROLLOUT IN GERMANY...

In a very complex environment...



...we developed a sustainable & economically viable fiber rollout plan



High-speed networks
(50–250 Mbps)



Finalize and monetize (Super) vectoring rollout for max. high-speed coverage until end 2019e

- 80% DT infrastructure
- 95% incl. wholesale



Gigabit networks (≥ 1 Gbps)

Start FTTH rollout from 2018

- New residential areas
- Business parks
- Telekom@School

Ramp up to 2 mn HH p.a. by 2021e

- White spots (subsidized)
- B2C winback areas

... complemented by cooperation & co-invest models and supported by a sensible wholesale access model

Benefits for DT:



Defend/grow market share



Maintain high & stable investment budget



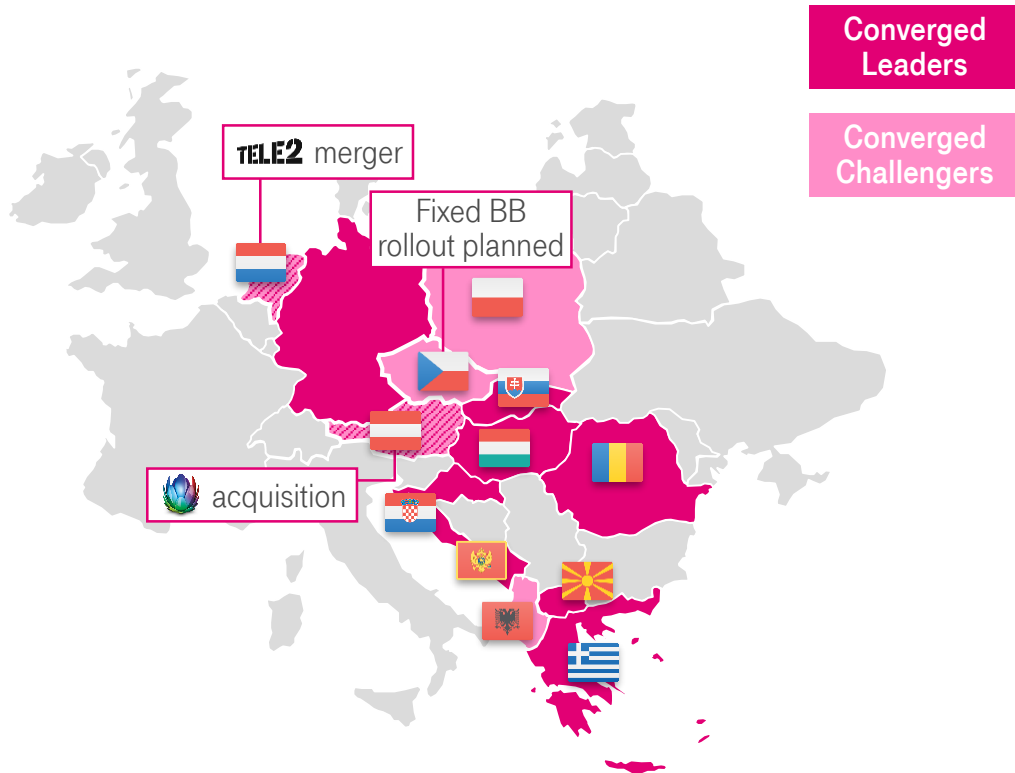
Adhere to strict FTTH/B return criteria: 7.5% IRR



Enable the Gigabit society

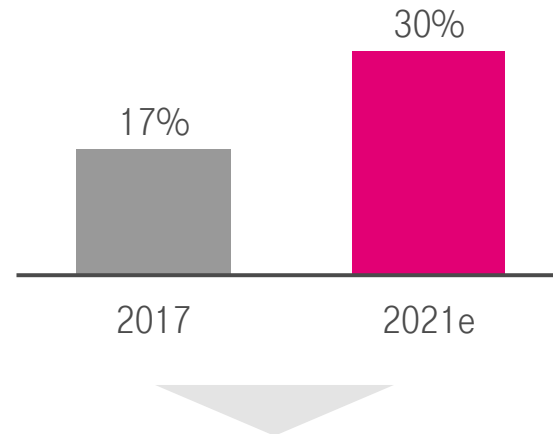
...AND INTEGRATING GIGABIT NETWORKS IN EUROPE

Uniquely positioned to drive FMC...



...and further drive broadband rollout

FTTH/B household coverage¹,
% of HH in GR, HU, SK, HR



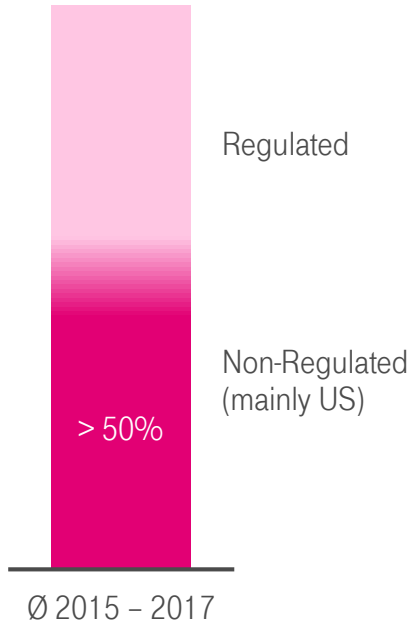
- Triple organic FTTH/B investment (run-rate p.a.) within stable total capex envelope in EU NatCos until 2021e¹
- FMC proposition to drive penetration & mitigate back book risks (front book ≈ back book)

¹ FTTH/B and Cable ED3.1, excluding Romania

MANAGE REGULATION



In a regulated environment...

DT Group revenue split



...German telecommunications policy sets the right tone

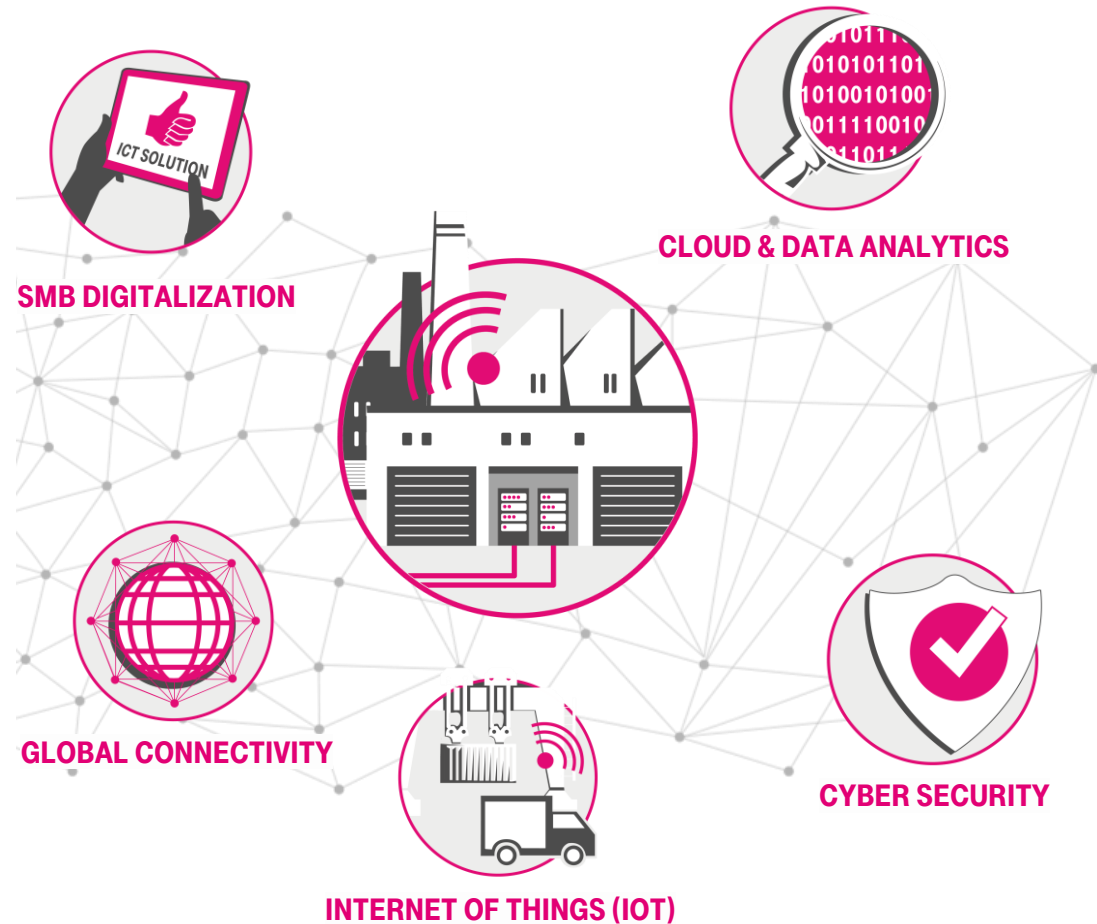
Recent developments

 German coalition agreement 2018	Fiber	<ul style="list-style-type: none"> “We create incentives via change to ex-post Open Access regulation instead of detailed ex-ante Regulation like copper”
	Subsidies	<ul style="list-style-type: none"> “We want nationwide Gigabit networks until 2025, preferably with fiber into the building” “We expect €10-12 bn funding needs in this legislative period”
	5G	<ul style="list-style-type: none"> “We speed up densification of mobile networks and develop Germany to a leading market for 5G”
 EU regulation	Consolidation	<ul style="list-style-type: none"> Foster market environment for further infrastructure investment

DT position

- Create conditions for collaborations
- Provide fair framework for fiber investments
- Make sensible use of public funding
- Release spectrum for 5G, securing investment incentives
- Push approval of merger in NL and AT

WE INCREASE BUSINESS PRODUCTIVITY...




Our proof points


- ✓ We build horizontal platforms & vertical solutions for the **Internet of Things**: NB-IoT network in 8 EU markets & US, IoT unit established
- ✓ We enable **E2E SMB digitalization** with **secure & reliable ICT solutions**: Existing trusted customer relationships, 20% IT/Cloud revenue growth in SMB in 2017 in Germany
- ✓ We provide leading **cyber security** solutions: German market leader with > 1,400 experts
- ✓ We enhance our **global connectivity** proposition: Germany-outbound focus, smart SD-WAN powered by ngena
- ✓ We provide platforms for secure data exchange and **analytics**: Telekom Data Intelligence Hub (DTH) launched

...WITH SECURE ICT SOLUTIONS FOR SMB DIGITALIZATION

We leverage our strengths...

 Trusted partner with strong B2B brand & customer base

 Large & efficient sales force

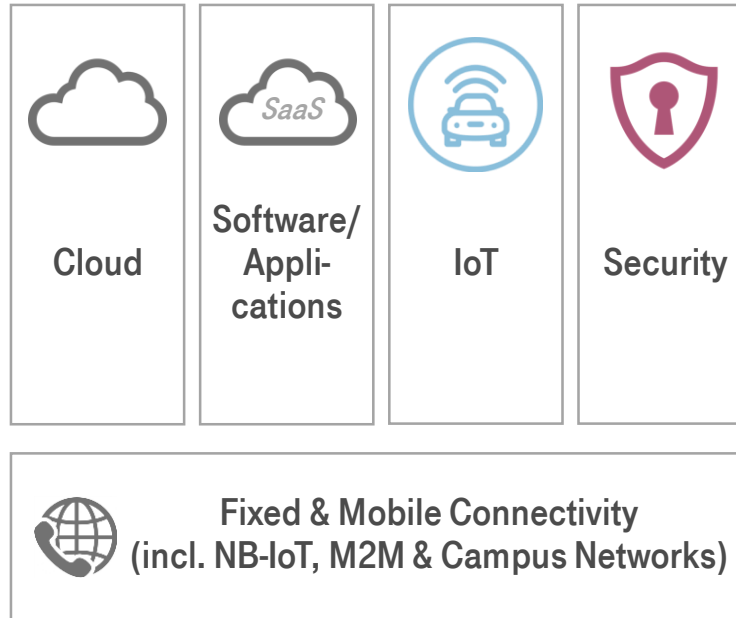
 Reputation as ICT provider (8x isg/Experton leader)

 Local partner network

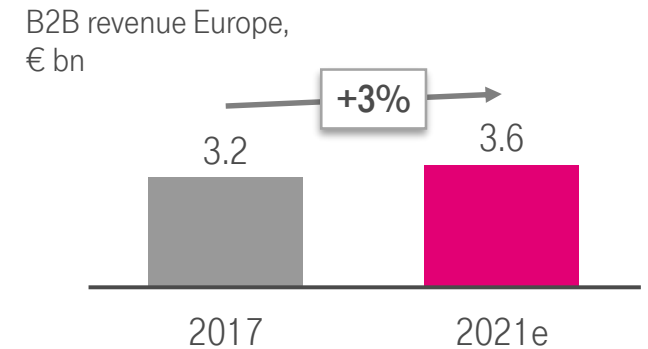
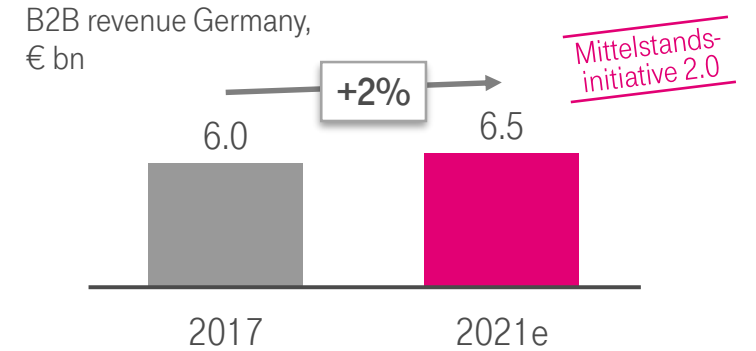
CAGR

...with a strong portfolio...

Connectivity-Based Converged ICT Portfolio



...to grow in SMB digitalization



CLEAR TURNAROUND PLAN FOR T-SYSTEMS

Preserving optionality with portfolio-based steering...



Revenues
2017

€2.2 bn

€2.1 bn

€2.5 bn

CAGR
2017-2021e



...and turnaround initiatives

- Sales revitalization
- Portfolio focus
- Delivery integration
- Overhead reduction



- ✓ Transform revenue mix towards growth portfolio
- ✓ Increase profitability (Cash contribution breaking even in 2020e)
- ✓ Maintain strategic optionality

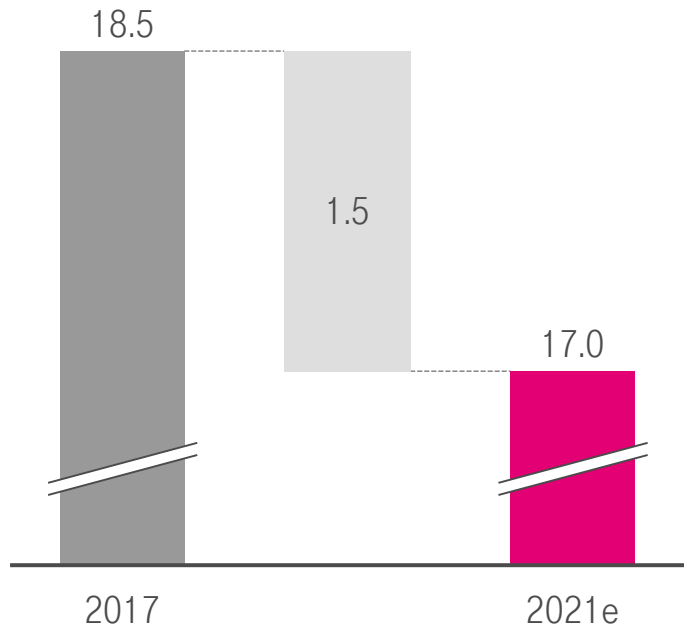
GROWTH UNDERPINNED BY VALUE TRANSFORMATION



EFFICIENCY TO FUND INVESTMENTS INTO GROWTH

Accelerated cost reduction...


Indirect Costs DT Group ex US, €bn



- Address cost savings potential **more effectively** than in the past
- Focus on **operational excellence** and **lean organizational structure** (e.g. enabled by digitalization)

...across all segments

 -€0.8 bn

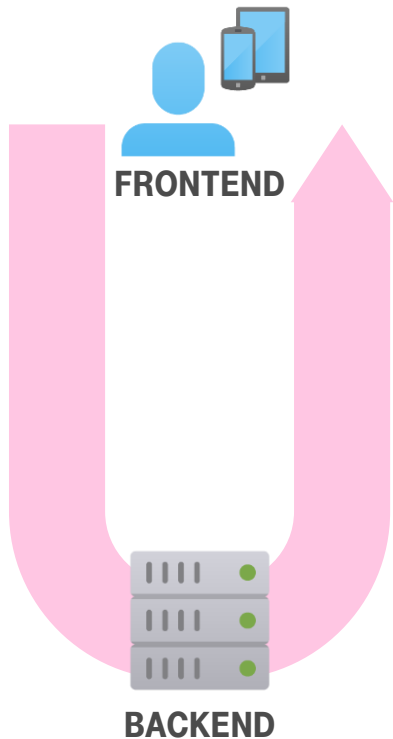
 -€0.4 bn

 -€0.1 bn

 -€0.2 bn
(incl. GROUP DEVELOPMENT)

DIGITAL TRANSFORMATION TO ADDRESS UNTAPPED POTENTIAL

We have started our E2E digitalization...



We digitalize our touchpoints:

“Mein Magenta App” in Germany¹, One App for EU

We simplify our products and services:

e.g. EU tariff reduction

We automate our core business processes:

1,500 bots handling 20 mn transactions in Germany

We exploit our data:

> 300 analytics use cases, > 50 ongoing AI projects,
> 100 experts working on AI

We transform our IT systems:

Portfolio approach in Germany, harmonized API Layer in EU

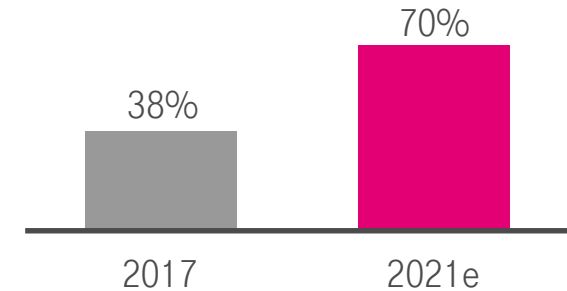
We digitalize our network for real-time operations:

IP/BNG migration, Access 4.0

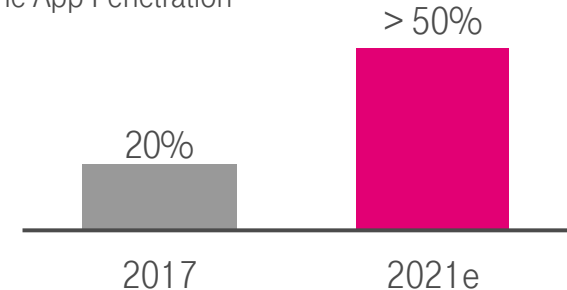
...and aim for more



Share of resolved requests in digital channels²



One App Penetration



¹ Formerly MagentaSERVICE App ² E-Service Share Interaction, year end 2017

BOLD CULTURAL TRANSFORMATION...

Strengthened the team on all levels...

New board members ...



Adel Al-Saleh
T-Systems



Srini Gopalan
Europe



Dirk Wössner
Germany

...supported by a strong international management team



Omair Khan
Data Governance



Omar Tazi
Product Innovation &
Customer Experience



Alex Choi
Research & Technology
Innovation



Campbell McClean
IT Architecture



Surya Manepalli
Operational
Excellence TSI



Eva Somorjai
Human Resource
Europe



Debanjan Banerjee
Investment Monetization
Europe

...

...to drive cultural transformation



- **Transform culture & organization** towards agile mindset (220 T³ transformation leaders participated in classes in 2017)
- **Support cross-functional collaboration** (90% of business leader placements in 2017 were cross-functional)
- **Establish new ways of working** (T&I established with new pool organization; > 10k employees enabled in “Design Thinking” in 2017)
- **Drive empowerment and entrepreneurship**

...INNOVATIVE BUSINESS & STEERING MODELS...

New asset management & investment models

New Segment
Group
Development



Deutsche Funkturm



Innovative
Spin-Outs

Comfort Charge



MOBILEEDGE X

Growth &
Financial
Investments



relayr.

ENTREPRENEURIAL VALUE CREATION

Innovative ways of working

Flexible Incentive
Models



Entrepreneurial headroom
Collective targets

Agile
Development



Iterative & incremental
Cross-functional teams

Pool
Organizations



Competence Chapters
Project-based staffing

AGILITY & ACCELERATION

...TAKING CORPORATE RESPONSIBILITY

“Lighthouse” examples...

Climate Change & Enabling Potential



Sustainable Supply Chain



Human Rights & Employee Relations



Social Engagement



Digital Ethics



...of contribution to the sustainable development goals

- **Climate:** 20% CO₂ footprint reduction by 2020e¹
 - **Renewable energy share:** Group at 41% (2017), TMUS aims at 100% by 2021e
 - **Impact:** Positive CO₂ effect enabled on customer side at 71% above DT emissions
-
- **ESG² risk assessment** integral part in purchasing process
 - 81% of **procurement volume reviewed** according to ESG² criteria (i.e. audits)
 - **Joint audit** corporation and **supplier development program**
-
- “**Code of Human Rights & Social Principles**” & “**Employee Relations Policy**”
 - Continuous human rights **due diligence** covering > 100 business units³
-
- **41%** of social engagement activities **focus on media skills & digital literacy**
 - **Telekom Foundation** with focus on STEM⁴, digital teaching and learning
 - Integration into the German labor market: **DT employs ≈ 340 refugees**
-
- **Ethics codex for responsible use of Artificial Intelligence implemented**
 - Codex defines how DT will use AI for product and service development

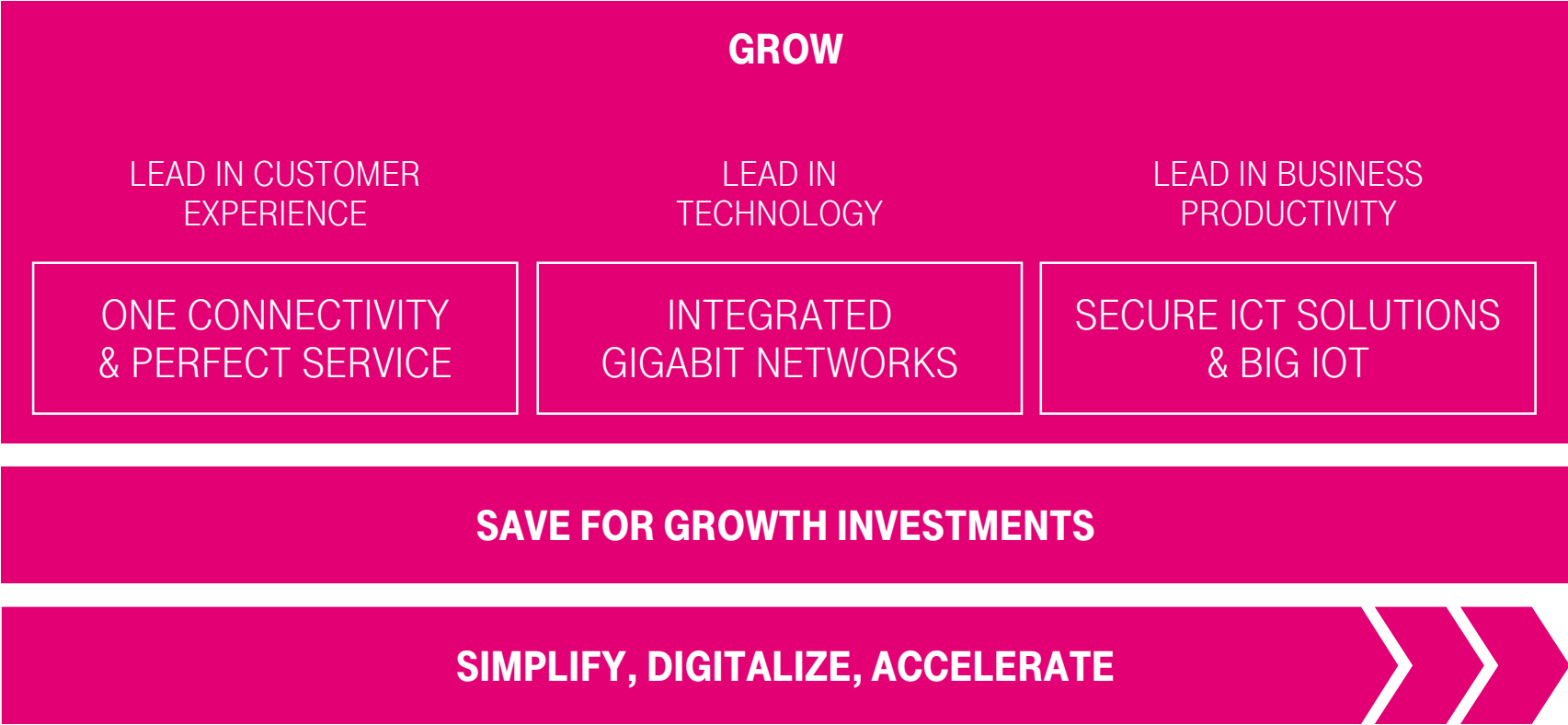
¹ Compared to base year 2008, without T-Mobile US, in t CO₂

² ESG: Environmental, Social & Governance

³ Incl. assessments of basic minimum requirements

⁴ Science, technology, engineering and mathematics

OUR AMBITION: LEADING EUROPEAN TELCO



MID TERM AMBITION LEVEL

GROUP STRATEGY

GERMANY

SYSTEMS SOLUTIONS

TECHNOLOGY & INNOVATION

T-MOBILE US

EUROPE

GROUP DEVELOPMENT

FINANCE

MID TERM AMBITION LEVEL

	Mid term ambition level ¹	Year	Implications of US deal ²
GROUP REVENUES	CAGR +1–2%	2017–2021e	Confirmed
GROUP ADJ. EBITDA	CAGR +2–4%	2017–2021e	Confirmed
GROUP FCF	CAGR ≈ +10%	2017–2021e	Slightly dilutive in 2021e & accretive in 2022e
GROUP ADJ. EPS	≈ €1.20	2021e	Slightly dilutive in 2021e & accretive in 2022e
GROUP ROCE	ROCE > WACC	2021e	Confirmed
GROUP CASH CAPEX	Ex US stable	2017–2021e	Confirmed
GROUP INDIRECT OPEX	Ex US –€1.5 bn	2017–2021e	Confirmed
SHAREHOLDER REMUNERATION POLICY (2018–2021)³	Dividend will reflect growth in adjusted EPS. Floor remains at €0.50 per share	2017–2021e	Confirmed

¹ Based on constant exchange rates (Average exchange rate 2017 of € 1 = US\$1.13) and no further changes in the scope of consolidation ² Assumption: closure date Jan. 1st, 2019

³ Subject to necessary AGM approval and board resolution. 2018 dividend target of €0.70 per share. Share buy backs to be considered, but not relevant for first 3 years in US deal scenario.

WHY DT: BEST POSITIONED FOR FUTURE GROWTH



Unique **FOOTPRINT & ASSET BASE**

- ✓ **Transatlantic presence** in worlds' leading economies
- ✓ **Converged leader** in Europe with **superior network position**



GROWTH Profile

- ✓ **95% of footprint growing** with further FMC growth potential
- ✓ Supercharging the Un-Carrier **boosts DT's financial profile** (EPS accretive from year 3)



Untapped **VALUE POTENTIAL**

- ✓ Still untapped potential from **cost transformation**
- ✓ **Accelerated digitalization** to improve CX and reduce costs



Clear **STRATEGY**

- ✓ Focus on **connectivity core & adjacent business**
- ✓ Focused **portfolio approach & capital allocation**



Best **TEAM**

- ✓ **New international leaders** with excellent track record
- ✓ **Walk the talk & winning mentality**

BOTTOM LINE: WE HAVE A PLAN

-  Accelerate FMC growth
-  Foster fiber monetization
-  Establish "Perfect Service" (Der Service)
-  Close convergence gaps in non-integrated NatCos
-  Intensify FMC & TV commercialization
-  Supercharge the Un-Carrier
-  Intensify team of experts (TEX) approach
-  Fiber rollout: Ramp up to 2 mn HH p.a. by 2021e
-  99% LTE outdoor coverage in 2020e
-  Fiber rollout: Ramp up to 0.75 mn HH p.a. by 2021e¹
-  99% LTE outdoor coverage in 2021e
-  Close remaining coverage gap
-  Accelerate rollout of low band spectrum
- T&I**
 - 5G & IoT innovation leadership
 - Complete IT transformation
-  Expand IT/TC portfolio for SME via "Mittelstands-initiative 2.0" (€6.5 bn B2B revenue in 2021e)
-  Accelerate B2B growth (€3.6 bn revenue in 2021e)
-  Gain fair share in B2B
- TSI**
 - Grow in IoT
 - Expand security portfolio & commercialization
 - Establish ngena as global SD-WAN solution

¹ FTTH/B and Cable ED3.1, excluding Romania

ONE CONNECTIVITY & PERFECT SERVICE

INTEGRATED GIGABIT NETWORKS

SECURE ICT SOLUTIONS & BIG IOT

US Deal Implications

Group Revenues: CAGR +1-2% (2017-2021e) ✓

Group Adj. EBITDA: CAGR +2-4% (2017-2021e) ✓

Group Ind. Opex: Ex US -€1.5 bn (2017-2021e) ✓

Group Cash Capex: Ex US stable (2017-2021e) ✓

Group FCF: CAGR ≈ +10% (2017-2021e) ↘ 2021e ↑ 2022e

Group Adj. EPS: ≈ €1.20 (2021e) ↘ 2021e ↑ 2022e

GROWTH

SAVE FOR GROWTH INVESTMENTS

SIMPLIFY, DIGITALIZE, ACCELERATE >>>

- Simplify offerings
- Push online sales & service channels
- Drive cultural transformation
- Cut off legacy systems
- Drive E2E process automation
- Enable innovative business & steering models
- Foster data-driven decision-making

- Internal workforce 0.5
- External workforce 0.3
- Non-Headcount related Opex 0.7

XX Indirect cost savings target DT ex US 2017-2021e, € bn