# DEUTSCHE TELEKOM CAPITAL MARKETS DAY 2018



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LIFE IS FOR SHARING.

## **AGENDA CAPITAL MARKETS DAY**

## THURSDAY, MAY 24<sup>TH</sup>

19:15	Evening Event	
18:30	Demonstrator Sessions	Technology Top Management
17:45	<b>Technology &amp; Innovation</b> (incl. Q&A)	C. Nemat Board Member for Technology & Innovation
16:45	Segment presentation: Systems Solutions (incl. Q&A)	<b>A. Al-Saleh</b> Board Member for T-Systems
6:30	COFFEE BREAK	
15:15	Segment presentation: Germany (incl. Q&A)	<b>D. Wössner</b> Board Member for Germany
14:00	Group Strategy (incl. Q&A)	<b>T. Höttges</b> CEO
13:30	Registration (Deutsche Telekom, Landgrabenweg 151, Bonn)	



## **AGENDA CAPITAL MARKETS DAY**

## FRIDAY, MAY 25<sup>TH</sup>

09:00	Segment presentation: T-Mobile US (incl. Q&A)	Team T-Mobile
10:15	Segment presentation: Europe (incl. Q&A)	<b>S. Gopalan</b> Board Member for Europe
11:15	COFFEE BREAK	
11:30	Segment presentation: Group Development (incl. Q&A)	<b>T. Langheim</b> Executive Vice President
12:00	Finance	<b>T. Dannenfeldt</b> CFO
13:00	Wrap-up (incl. Q&A)	T. Höttges, CEO T. Dannenfeldt, CFO C. Illek, (CFO Jan 1st, 2019)
13:30	End of CMD	



# **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** 

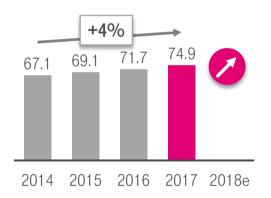
## ...TURNED DT INTO A GROWTH COMPANY

# **REVIEW 2014 - 2018**

## **GROWTH ABOVE COMMITMENTS**

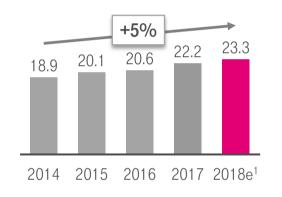
## Revenue (organic)<sup>1</sup>

€bn



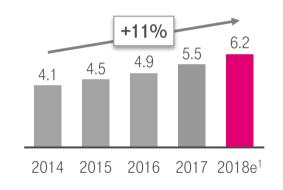
## Adj. EBITDA (organic)<sup>1</sup>

€bn



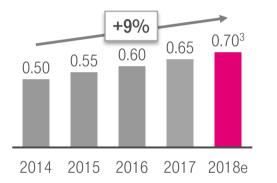
#### FCF<sup>2</sup>

€bn



#### Dividend per share

€



#### **CMD AMBITION 2014-2018:**

**CAGR +1-2%** 



**CMD AMBITION 2014-2018:** 

**CAGR +2-4%** 



**CMD AMBITION 2014-2018:** 

**CAGR +10%** 



**CMD AMBITION 2014-2018:** 

**FOLLOW FCF** 



<sup>&</sup>lt;sup>1</sup> Based on constant exchange rates (Average exchange rate 2017 of €1 = US\$1.13); revenue and adj. EBITDA corrected for handset lease <sup>2</sup> Before dividend payments & spectrum invest

<sup>&</sup>lt;sup>3</sup> Subject to necessary AGM approval and board resolution

## **GROWTH PROFILE ACROSS OUR FOOTPRINT...**

**SYSTEMS SOLUTIONS** 

**GROUP STRATEGY** 

**GERMANY** 

#### **TMUS** revenue Germany revenue Europe revenue Excl. DFMG, \$ bn Organic, €bn €bn +10.8% 40.3 37.3 -0.6% +0.7% 29.7 22.0 21.8 -1.3% +0.5% 1.6 2014 2016 2017 2016 2017 2014 2016 2017 2014 CAGR

**T-MOBILE US** 

**TECHNOLOGY & INNOVATION** 

**EUROPE** 

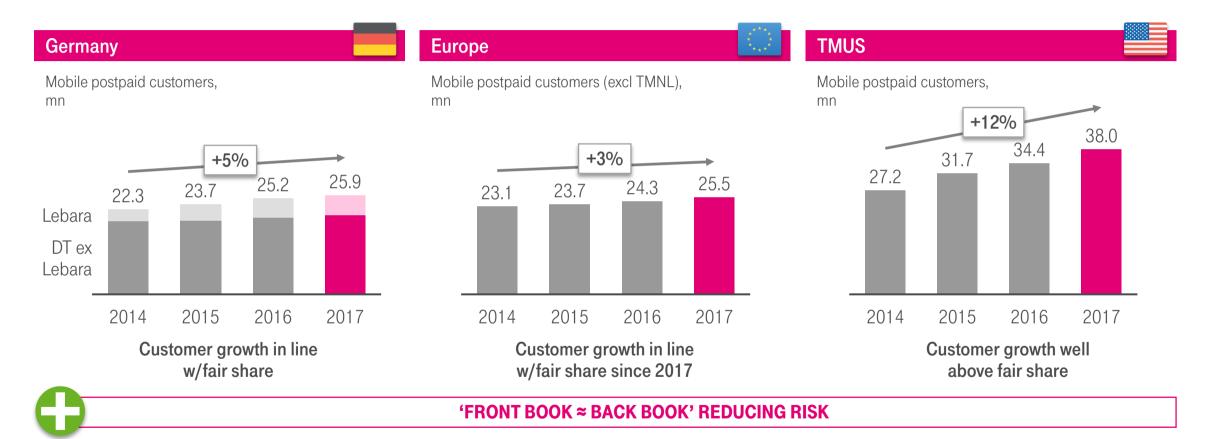
**GROUP DEVELOPMENT** 

**FINANCE** 

9

## ...SUPPORTED BY CONTRACT CUSTOMER GROWTH

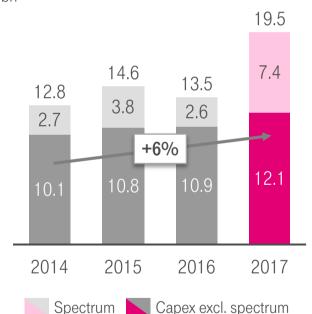
CAGR



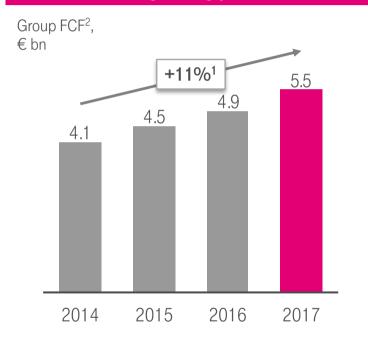
## **INVEST FOR SUSTAINED GROWTH MOMENTUM**

#### We heavily invested in the past...

Group Cash Capex<sup>1</sup>, € bn



## ...while delivering strongly on FCF...



## ...and creating the basis for future growth



## Germany

- **94% LTE Pop coverage** (2017)
- $\approx$  80% HH vectoring coverage (2019e)<sup>3</sup>



- **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

<sup>&</sup>lt;sup>1</sup> Based on constant exchange rates (Average exchange rate 2017 of €1 = US\$1.13) <sup>2</sup> Before dividend payments & spectrum invest

<sup>&</sup>lt;sup>3</sup> Delayed due to long regulatory process

## **WINNING MENTALITY: "BRING ME AWARDS"**

## **Network**

TESTSIEGER



OpenSignal Awards











best in test























































#### **Brand**























#### **Customer Service & Satisfaction**











## **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...**

**Ambition level 2018** 

#### **KEY FINANCIALS**

■ Group Revenue CAGR +1-2% (2014-2018)
■ Group Adj. EBITDA CAGR +2-4% (2014-2018)
■ Group FCF CAGR ≈ +10% (2014–2018)
■ Group ROCE > WACC in 2018
■ Group Cash CAPEX CAGR +1-2% (2014-2018)
<ul><li>Group Adj. OPEX decrease (2014–2018)</li></ul>
<ul> <li>Following FCF growth: min. DPS of €0.50 p.a.</li> </ul>

## **Achievements 2017** Delivered/on track • +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

# **REMUNERATION** (2015–2018)

**SHAREHOLDER** 

<sup>1</sup> Compared to target of €1.8 bn

## ...AND HAVE LEARNED ALONG THE JOURNEY



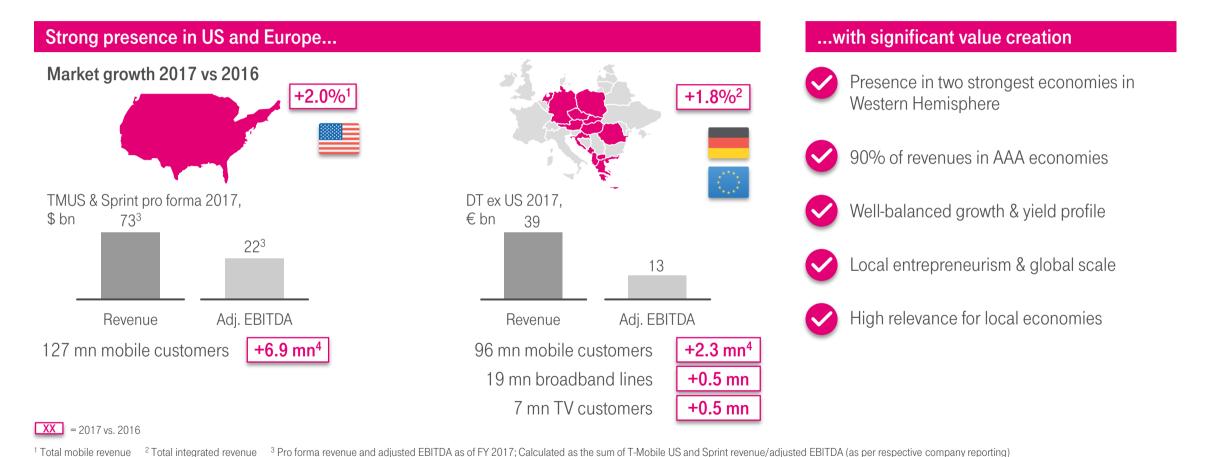
## Key learnings

- 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...**

<sup>4</sup> 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 AN EVEN STRONGER POSITION POST US DEAL

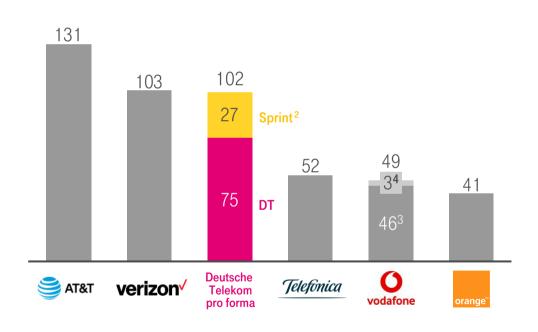
## **Attractive TMUS/Sprint deal terms**



- Attractive transaction terms
- Benefitting US consumers, investments & job creation
- Governance designed for efficient integration
- Robust capital structure

## DT's global position strengthened

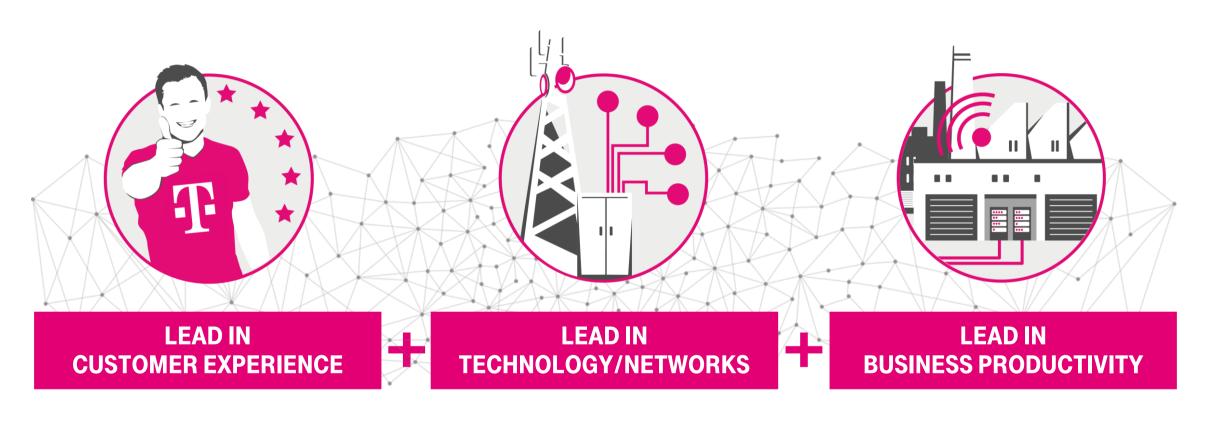
Reported Revenue 2017<sup>1</sup>, € bn



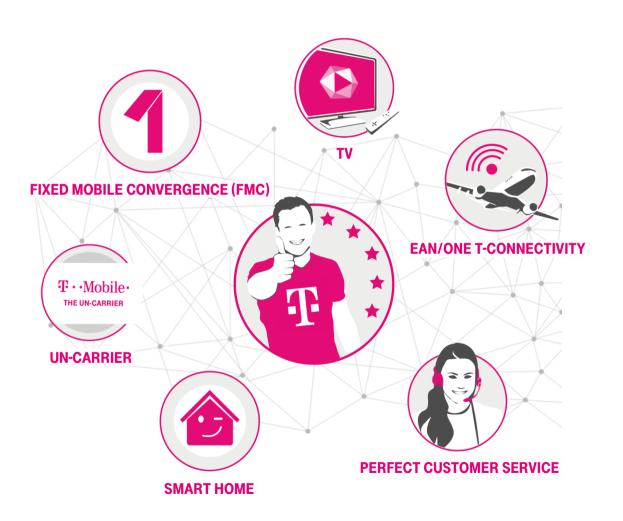
Source: Company information

<sup>&</sup>lt;sup>1</sup> \$-denominated figures converted in € based on exchange rate as of April 20<sup>th</sup>, 2018 (€1 = US\$1.22745) <sup>2</sup> Based on Sprint FY 2017 reported revenue, converted in € <sup>3</sup> LTM as of Sep. 2017 and excluding Netherlands operations in H2 FY 2016/17 <sup>4</sup> 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

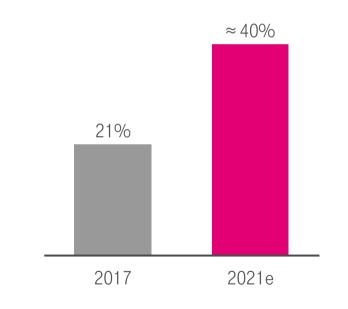
- We provide one seamless T-connectivity: Connect App, European Aviation Network
- We offer the leading FMC proposition:
  +1.5 mn FMC customers in our integrated footprint (FY 2017)
- We are "The Un-Carrier" in the US: +11% post-paid customers in 2017
- We have made it to the living rooms with simple, 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 Magenta ID as single identifier **Customer Touchpoints** Omni-channel customer journey (Shop, Call Center, App etc.) Entertainment (TV, Video, Music, Gaming) Communication (Voice, Messaging, Video) Smart Home (Qivicon, Voice Hub etc.) **Consumer IT** (Cloud etc.) Security Seamless products & services Comprehensive portfolio positioned in the living room Integration across devices **Devices/Hardware** Seamless connectivity Access agnostic **Magenta Connectivity** Mobile Fixed Partner 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...



- 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

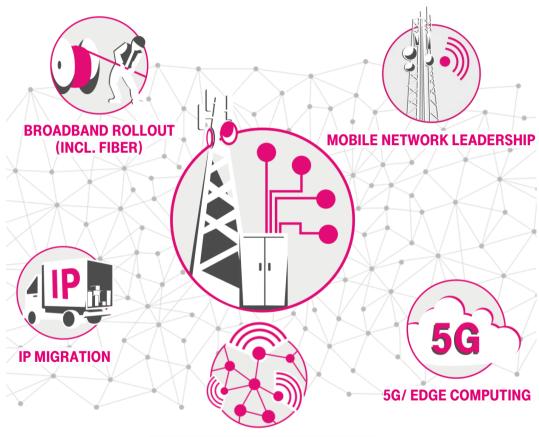


- Own P&L responsibility for dedicated teams
- Very high "Care NPS" (+9 pts. yoy 2017) at very low costs per account (-13% yoy 2017)
- Focus for 2018: global care to ensure 24/7 best customer experience

## ...reflected in our high ambitions > 80% $66\%^{2}$ Contact resolution within 24h ≈ 1% Rate of complaints 2017 2021e 34 pts. Net promoter score 74% **Customer service** nielsen satisfaction 2017 2021e

<sup>(</sup>TEX) <sup>1</sup> Formerly MagentaSERVICE App <sup>2</sup> Q1 2018

## WE ARE "DEDICATED NETWORK INVESTORS"



#### INTEGRATED GIGABIT NETWORKS

## 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)<sup>1</sup>
- 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, MobiledgeX launched

<sup>&</sup>lt;sup>1</sup> Bandwidth ≥ 50 Mbps, delayed due to regulatory decisions

## MOBILE NETWORK LEADERSHIP EVERYWHERE

## Germany Macro cell sites, + Small Cells 27 36 2017 2021e

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



CHIP









Europe

Macro cell sites,







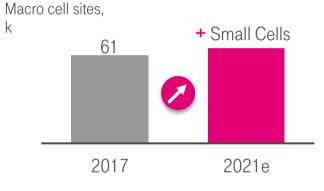
+ Small Cells

47

2021e







Extend network capacity & density to pave way for 5G









**GROUP STRATEGY** 

**GERMANY** 

SYSTEMS SOLUTIONS

**TECHNOLOGY & INNOVATION** 

**T-MOBILE US** 

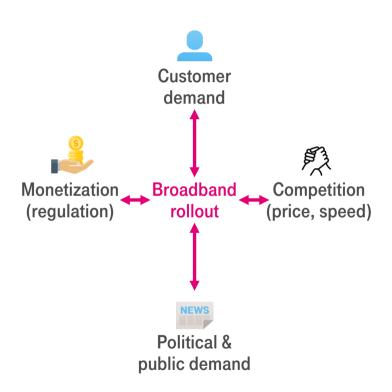
**EUROPE** 

**GROUP DEVELOPMENT** 

**FINANCE** 

## **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. wholebuy



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:**





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



## ...AND INTEGRATING GIGABIT NETWORKS IN EUROPE

## Uniquely positioned to drive FMC... Converged Leaders Converged **TELE2** merger Challengers Fixed BB rollout planned acquisition

#### <sup>1</sup> FTTH/B and Cable ED3.1, excluding Romania

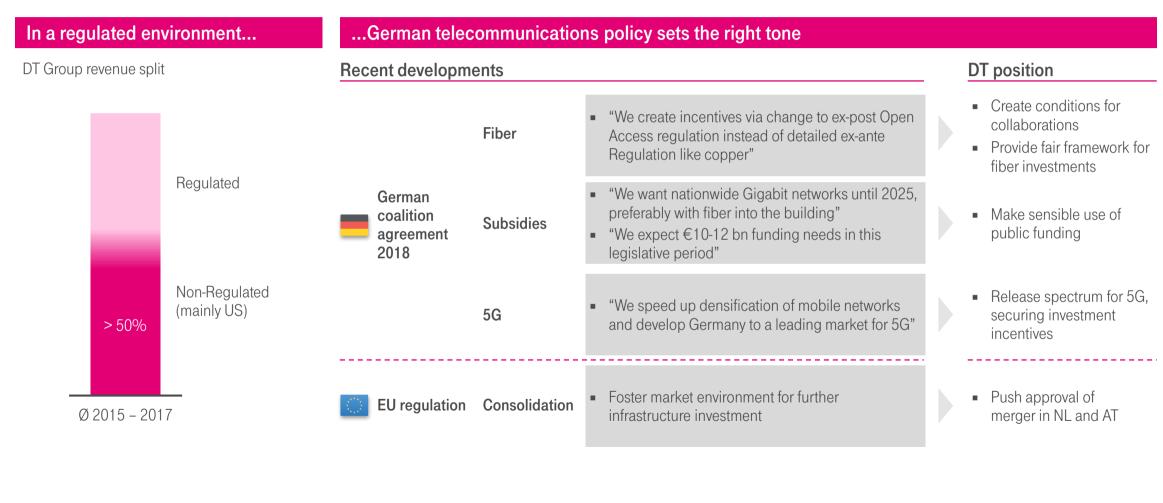
#### ...and further drive broadband rollout

FTTH/B household coverage<sup>1</sup>, % of HH in GR, HU, SK, HR

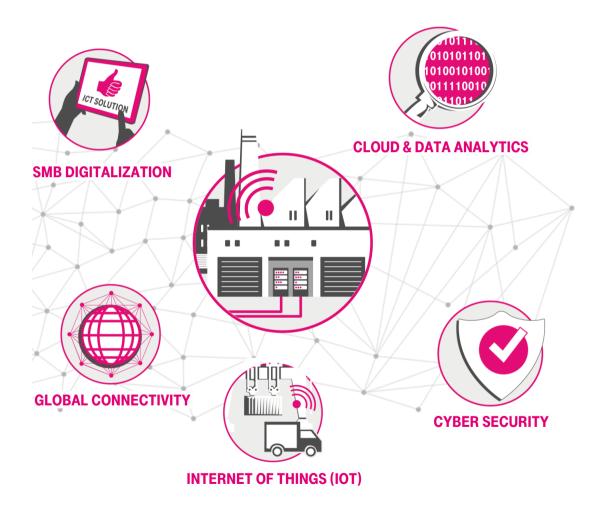


- Triple organic FTTH/B investment (run-rate p.a.) within stable total capex envelope in EU NatCos until 2021e<sup>1</sup>
- FMC proposition to drive penetration & mitigate back book risks (front book ≈ back book)

## MANAGE REGULATION



## 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: Germanyoutbound 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** 



Cloud

Software/ Applications

SaaS



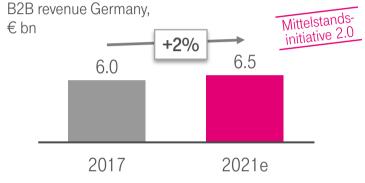
**IoT** 

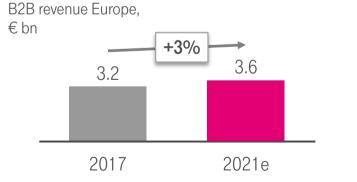


Security



...to grow in SMB digitalization



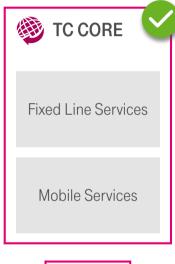


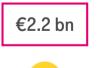
**Fixed & Mobile Connectivity** (incl. NB-IoT, M2M & Campus Networks)

29 **EUROPE FINANCE GROUP STRATEGY GERMANY** SYSTEMS SOLUTIONS **TECHNOLOGY & INNOVATION** T-MOBILE US **GROUP DEVELOPMENT** 

## **CLEAR TURNAROUND PLAN FOR T-SYSTEMS**

## Preserving optionality with portfolio-based steering...





CAGR 2017-2021e

Revenues

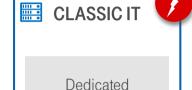
2017





€2.1 bn





SI Solutions

Managed
Infrastructure Services
& Private Cloud

€2.5 bn

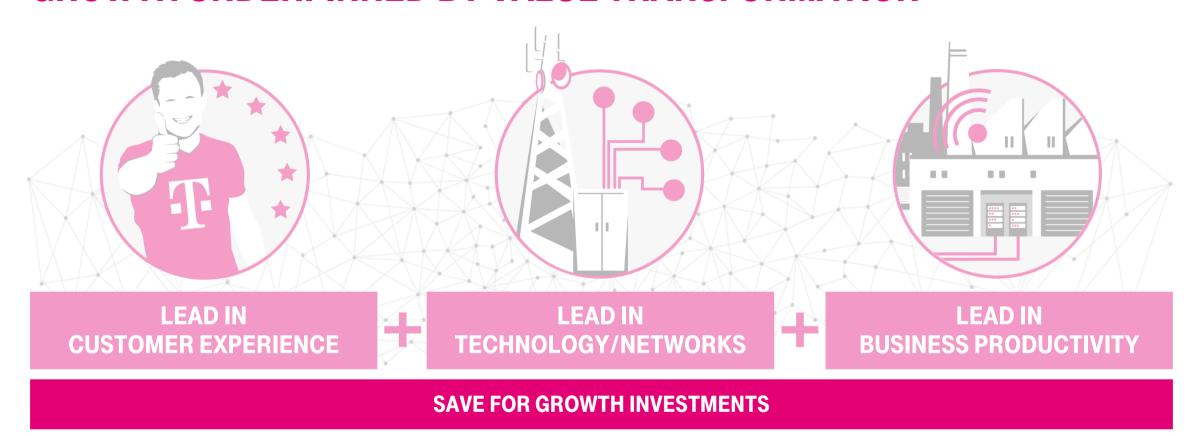


#### ...and turnaround initiatives

- 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**

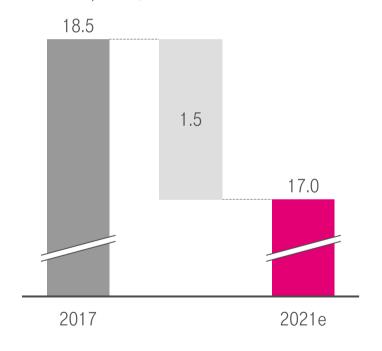


SIMPLIFY, DIGITALIZE, ACCELERATE

## **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

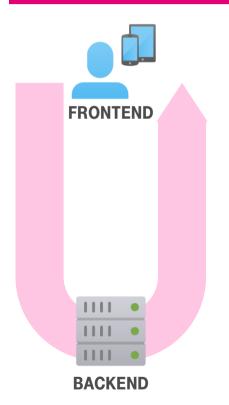


-€0.2 bn

(incl. GROUP DEVELOPMENT)

## DIGITAL TRANSFORMATION TO ADDRESS UNTAPPED POTENTIAL

## We have started our E2E digitalization...



#### We digitalize our touchpoints:

"Mein Magenta App" in Germany<sup>1</sup>, 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 Al projects,
- > 100 experts working on Al

## 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



<sup>&</sup>lt;sup>1</sup> Formerly MagentaSERVICE App <sup>2</sup> 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 T<sup>3</sup> 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 **Deutsche Funkturm New Segment** T··Mobile· Group T··Mobile· **Development** ngena **Innovative Comfort Charge Spin-Outs MOBILEDGE X** Growth & - CAPITAL PARTNERS relayr. **Financial a**xonize **Investments**

## 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

#### **ENTREPRENEURIAL VALUE CREATION**

#### **AGILITY & ACCELERATION**

## ...TAKING CORPORATE RESPONSIBILITY

## "Lighthouse" examples...

Climate Change & Enabling **Potential** 



Sustainable **Supply Chain** 



**Human Rights** & Employee Relations



Social Engagement



#### **Digital Ethics**

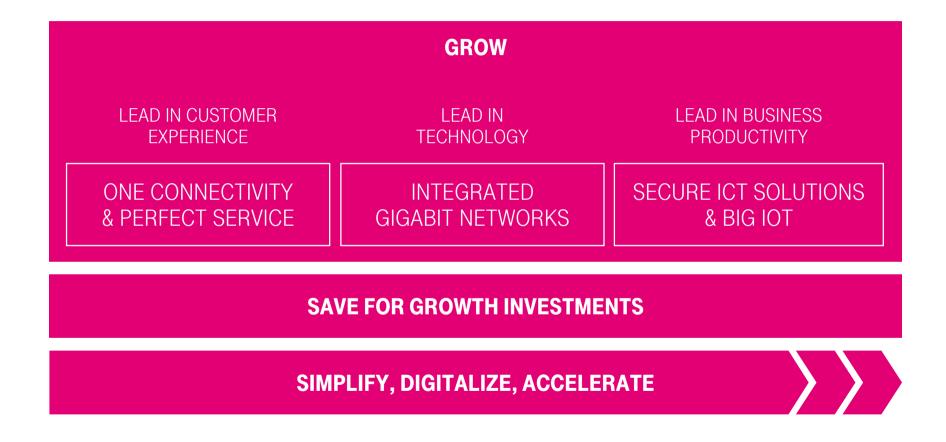


- <sup>1</sup> Compared to base year 2008, without T-Mobile US, in t CO<sub>2</sub> <sup>2</sup> ESG: Environmental, Social & Governance <sup>3</sup> Incl. assessments of basic minimum requirements <sup>4</sup> Science, technology, engineering and mathematics

## ... of contribution to the sustainable development goals

- Climate: 20% CO<sub>2</sub> footprint reduction by 2020e<sup>1</sup>
- Renewable energy share: Group at 41% (2017), TMUS aims at 100% by 2021e
- **Impact:** Positive CO<sub>2</sub> effect enabled on customer side at 71% above DT emissions
- **ESG<sup>2</sup> risk assessment** integral part in purchasing process
- 81% of **procurement volume reviewed** according to ESG<sup>2</sup> 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 units<sup>3</sup>
- 41% of social engagement activities focus on media skills & digital literacy
- **Telekom Foundation** with focus on STEM<sup>4</sup>, 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

### **OUR AMBITION: LEADING EUROPEAN TELCO**



# MID TERM AMBITION LEVEL

### **MID TERM AMBITION LEVEL**

	Mid term ambition level <sup>1</sup>	Year	Implications of US deal <sup>2</sup>
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) <sup>3</sup>	Dividend will reflect growth in adjusted EPS. Floor remains at €0.50 per share	2017-2021e	Confirmed

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

<sup>&</sup>lt;sup>3</sup> 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



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

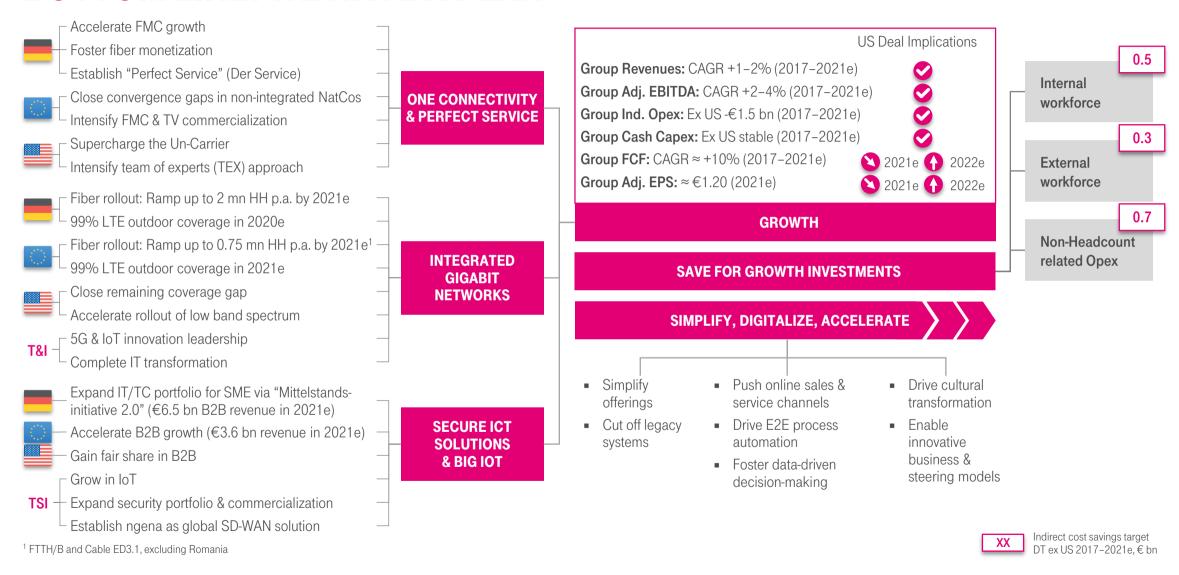


### **Best TEAM**

New international leaders with excellent track record

Walk the talk & winning mentality

### **BOTTOM LINE: WE HAVE A PLAN**



# GERMANY

DR. DIRK WÖSSNER

### **KEY MESSAGES**

MARKET WITH STABLE GROWTH

The German telecommunications market has returned to stable growth and Telekom is uniquely positioned within this market

**19** LEAD IN CUSTOMER EXPERIENCE

Our stable top-line growth focuses on four key drivers: Expanding our converged household penetration, continuing more for more and multi-brand approach in mobile, leveraging our improved broadband networks and TV proposition, and continued low churn through best-in-class service

♠ LEAD IN BUSINESS PRODUCTIVITY

"Mittelstandsinitiative 2.0" will further contribute to our strong growth momentum in the B2B market with secure ICT solutions

Finalizing our super-vectoring rollout and then reallocating our high budget towards fiber will yield strong broadband growth while addressing political concerns. Our proposed co-investment will ensure a fair risk reward 105 LEAD IN TECHNOLOGY – MOBILE

Leveraging our backhaul capacity and unprecedented site expansion while increasing speed and capacity with massive MIMO, SDRAN technology and enable innovative 5G services

VALUE TRANSFORMATION

Indirect cost reduction of €750 mn by 2021 through automation, operational excellence, and retirement. Improvements supported by consolidating management functions, flexible IT-architecture and investing into agile development skills

**17** FINANCIAL OUTLOOK

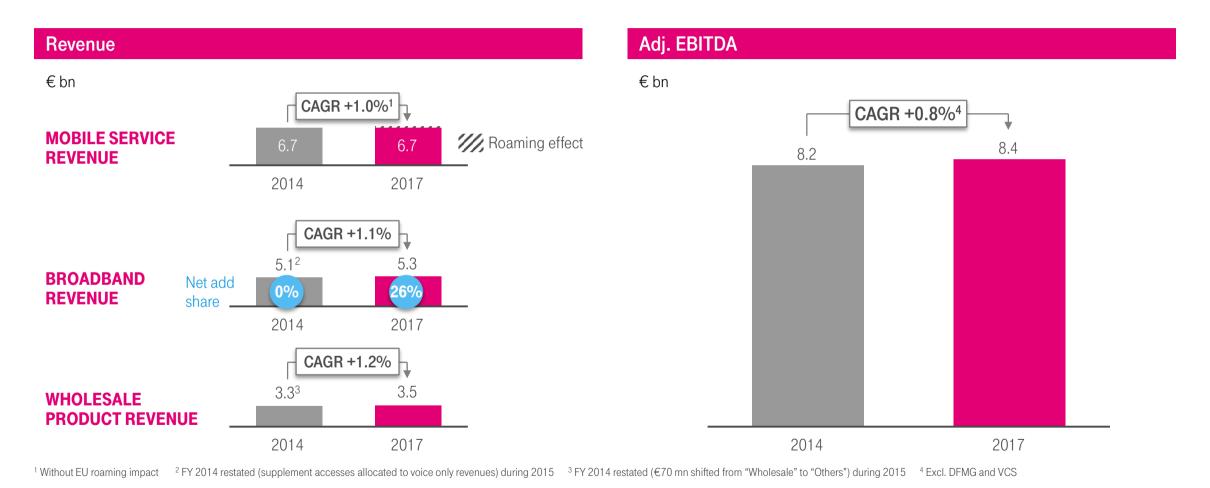
Continue our growth path of > 1% in revenue, +2-2.5% in adj. EBITDA and +4-5% in cash contribution with stable Cash Capex and Special factors (Cash)

# **REVIEW 2014 - 2018**

### **SOLID DELIVERY ON KEY PROMISES**

	Ambition level 2018	Achievements 2017 Deliv	ered/on track
■ #1 in FMC with MagentaEINS: 3 mn customers		■ 3.6 mn customers	
	<ul> <li>#1 in Mobile service revenue: ≈ 1%¹ CAGR</li> <li>&gt;36% market share</li> </ul>	■ #1 Mobile: +1.0%¹ CAGR > 36% market share	
	■ #1 <b>Broadband</b> : ≈ +2% CAGR > 40%² market share	■ #1 Broadband: +1.1% <sup>3</sup> CAGR ≈ 40% <sup>2</sup> market share	0
	Stable Wholesale revenue	■ +1.2% <sup>4</sup> CAGR 2014–2017	
QUALITY	■ Customer loyalty (TRI*M): ≈ 64 points	■ 59 points	0
FINANCIALS	<ul> <li>Adj. EBITDA margin: ≈ 42%</li> <li>(Pro Forma: ≈ 40%)<sup>5</sup></li> </ul>	■ 38.4%	0
	■ Growing adj. <b>EBITDA</b> : +1–2% CAGR	■ +0.8% CAGR 2014–2017	
	■ Growing adj. <b>Cash Contribution</b> : ≈ +2% CAGR	-2.7% CAGR 2014-2017	
	■ Revenue stabilization: +0.3%¹ CAGR	■ +0.1%¹ CAGR 2014–2017	
<sup>1</sup> Without EU roaming impact <sup>2</sup> Acc	cess market share in 2018e <sup>3</sup> FY 2014 restated (supplement accesses allocated to voice only revenues) during	2015 <sup>4</sup> FY 2014 restated (€70 mn shifted from "Wholesale" to "Others") during 20	15 <sup>5</sup> Excl. DFMG and VCS

### **GERMANY RETURNED TO GROWTH IN REVENUE & EBITDA**



### **HEALTHY AND STABLE MARKET ENVIRONMENT ENABLES GROWTH**

#### Market insights and trends



Stable economy with positive outlook

GDP +2.3% in 20181



Well segmented market.
Willingness to pay for quality & service



Stable & long-term capacity models for fixed & mobile in place

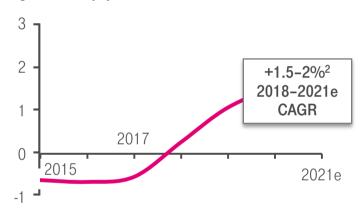


**Expected improving regulatory environment** 

Stable IP BSA pricing until 2022, MTR-glidepath defined until 2020

### Mobile market back to growth...

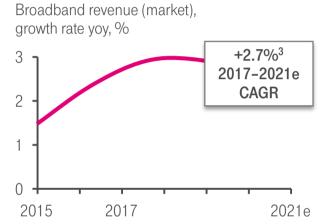
Service revenue (market), growth rate yoy, %



# After 3 years of decline, positive development expected

- 3-player market with capacity models for MVNOs
- Catch up in mobile usage (still low average consumption in Germany)

#### ...and still positive broadband momentum



# Broadband- & high-speed penetration supporting growth

- High-speed demand increases by ≈ 40% yoy on telco infrastructure
- Broadband growth due to low penetration (78% HH-penetration<sup>4</sup>)

Source: <sup>1</sup> BMWi estimate <sup>2</sup> AnalysysMason/IDC <sup>3</sup> AnalysysMason Telco Market Aug. 2017 <sup>4</sup> Credit Suisse Research Mar. 2018

### WE ARE UNIQUELY POSITIONED IN THE GERMAN TELCO MARKET



**\$40**<sub>BN</sub>

Most valuable telco brand in Germany

3.6 MN

Lead in converged customers

#1

B2B market leader in Germany

+20%

IT/cloud growth leader in SMB

#1

Winner of most telco service tests

18<sub>MN</sub>

Most customers on IP-platform

 $\approx 80\,\%$ 

Most mobile sites connected via fiber

95%

Outstanding winner of 95% of all network tests

UNLIMITED & STREAMON

#1 telco innovator in Germany

<sup>1</sup> Growth 2016-2017

# STRATEGY 2018 - 2021

### **GERMANY CONTRIBUTING TO GROUP STRATEGY**



### **Ambition Germany**

- 1 LEAD IN CUSTOMER EXPERIENCE
  Strengthen market leadership with stable top line growth in consumer market
- 2 LEAD IN BUSINESS PRODUCTIVITY
  Continue strong growth momentum in B2B with secure ICT solutions
  ("Mittelstandsinitiative 2.0")
- 3 LEAD IN TECHNOLOGY

  Maintain network leadership based on demand driven network rollout within stable Capex budget
- 4 VALUE TRANSFORMATION

  Clear commitment to efficiency improvements driven by digitalization

### 11 LEAD IN CUSTOMER EXPERIENCE



### Key growth drivers



#### **CONVERGENCE**

Expanding our converged household penetration with MagentaEINS



#### **MOBILE**

Continuing our successful more for more multi-brand approach



#### **BROADBAND/TV/WHOLESALE**

Leveraging our improved fiber network & TV proposition



#### **SERVICE**

Continuing low churn through best-in-class service

# **CONVERGENCE:** CONTINUE MAGENTAEINS SUCCESS STORY

#### More for more strategy pays off



#### HIGHER REVENUE PER HOUSEHOLD

**+€9.00** 

Additional revenue per household



#### HIGHER CUSTOMER LOYALTY

**-50**%

Churn rate (mobile/fixed)



#### HIGHER CUSTOMER SATISFACTION

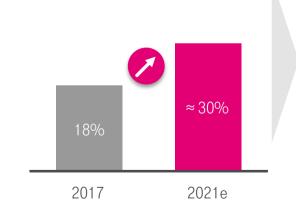
**+19**pts

Net Promoter Score vs. consumer base<sup>1</sup>

### Growing converged base with focus on value

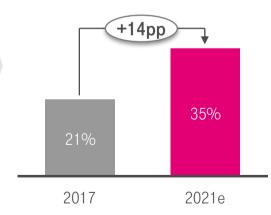
Cross-sell into base and add additional SIM cards/family offers

Share MagentaEINS households/ broadband households,



Secure high share of revenue in converged offer

MagentaEINS revenue share, %



<sup>&</sup>lt;sup>1</sup> Average of last four data points of Consumer segment NPS vs. MagentaEINS

# **MOBILE: RELEVANT MARKET SEGMENTS ADDRESSED**

### Multi-brand strategy with clear focus on premium segment



Revenue

- Focus on defending leading position with innovative services (e.g. StreamOn, Unlimited)
- Differentiate through handset portfolio and pricing





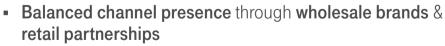
- Aim for fair-share through fast-follower strategy with flexible "build-yourself" tariffs
- Strong digital heritage & reactive pricing strategy















sparhandy.



SIM Cards

<sup>&</sup>lt;sup>1</sup> Rough estimation based on internal market survey

## **MOBILE: DIFFERENTIATION WITH INNOVATION & MORE FOR MORE**

# Innovative more for more strategy **INNOVATION STRATEGY** Ŧ IOT **MAGENTA MOBIL XL** STREAM ON **WORRY FREE MORE 4 MORE** Consumer IoT solutions allow ARPU uplift vs. M2M

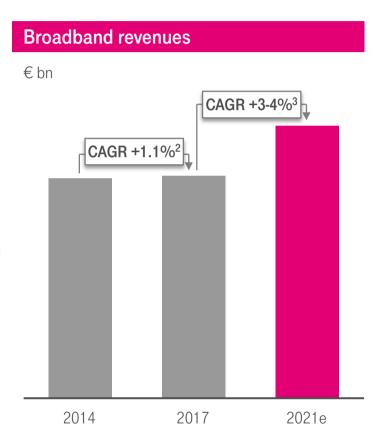
# Mobile service revenues € bn CAGR ≈+2% CAGR +1%1 +3.2% YOY Q1/18 2014 2017 2021e

<sup>&</sup>lt;sup>1</sup> Without EU roaming impact

<sup>&</sup>lt;sup>2</sup> Average growth rate adjusted for IFRS 15 impact; 2021e visually adjusted for IFRS 15

# **II** BROADBAND: GROWTH WITH FTTX COVERAGE & SPEED

#### Broadband revenue growth drivers Availability of ≥50 Mbit/s **BANDWIDTH INCREASE** 62% Higher speeds yield low churn and good 33% gross-add momentum 2019e 2016 2018e Broadband churn rate 2017, % 18% INCREASED CUSTOMER LOYALTY High-speed customers vs. ADSL broadband 6 Mbit/s 25/50 Mbit/s 1 Mbit/s Pay-TV share, %1 50% **TV GROWTH** Smart content investments & leading platform increase broadband attractiveness. 2015 2017 2021e



<sup>&</sup>lt;sup>1</sup> Customers with at least one booked paid package <sup>2</sup> FY 2014 restated (supplement accesses allocated to voice only revenues) during 2015

<sup>&</sup>lt;sup>3</sup> Including business IP products (e.g. DLAN, Company Connect); average growth rate adjusted for IFRS 15 impact; growth 2017–2021e without definition change approx. 1pp lower

# **II TV: CONTENT AGGREGATOR WITH SMART INVESTMENTS**

### TDG is the only growing TV operator TV net adds FY 2017. TV market share, 260 12% 8% tele columbus unitumedia vodafone Ŧ -65 -67

#### Our differentiators drive further growth



# BEST CONTENT AGGREGATOR

- Exclusive series: 3.7 mn views<sup>2</sup>
- Smart content investments with high customer perception



# BEST USER INTERFACE

- Award winning experience:
   Best image/audio quality
- Differentiating features: Voice control, 2<sup>nd</sup> screen, mobile app



# LEAD IN SPORTS CONTENT

- Most popular sports content:
   Bundesliga Conference & 3. Liga
- Exclusive sports rights: BBL, Ice hockey



# NEW TARGET AUDIENCE

- Focus on young audience
- New segments: Housing industry

-91

¹ TDG including Entertain IPTV and Sat, Vodafone Coax and IPTV lines, Telecolumbus incl. Primacom & Pepcom

² Since start in Oct. 2017

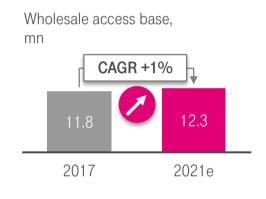
# **11** WHOLESALE: DRIVING GROWTH WITH FIBER MONETIZATION

#### Stable Wholesale access base & ARPA growth



#### SUBSCRIBER GROWTH

- "Kontingentmodell" as reliable long-term model to provide access to our fiber infrastructure
- Low churn due to attractive wholesale platform (bandwidth)

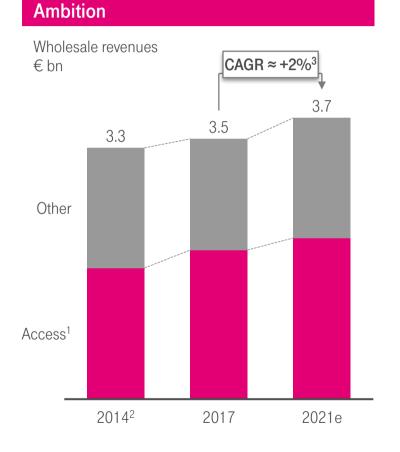




#### **ARPA GROWTH**

- ARPA increase driven by shift ULL/BSA
- Stable regulatory environment (fixed IP BSA pricing up to 2022)





<sup>&</sup>lt;sup>1</sup> Carrier customers <sup>2</sup> FY 2014 restated (€70 mn shifted from "Wholesale" to "Others") during 2015 <sup>3</sup> Average growth rate adjusted for IFRS 15 impact

# **II SERVICE: TOWARDS A LEADING CUSTOMER EXPERIENCE**

#### Leading customer experience in products and service



- Big data analytics for early fault detection
- Proactive customer information in case of critical incidents, contract changes, IP migration, etc.

SMS/year for proactive customer interactions





**FLEXIBLE & DIGITAL** 

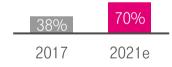
 Self-service via Mein Magenta App for reduction of service calls (e.g. contract status & changes, invoice, data usage)

 Self-administration for SMB (e.g. Cloud PBX)

Simplification of product portfolio
 Seamless customer service on all

channels (e.g. web, hotline, shop)



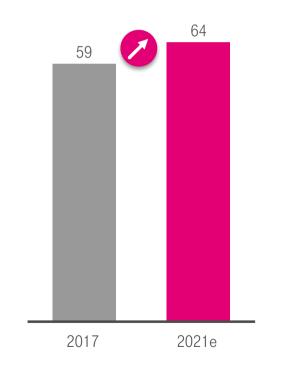


Rate of complaints,



### Ambition

Customer loyalty (TRI\*M), in points



SIMPLE & SEAMLESS

<sup>&</sup>lt;sup>1</sup> E-Service Share Interaction, year end 2017

### **2** LEAD IN BUSINESS PRODUCTIVITY



### B2B growth areas



#### **CONNECTIVITY & INFRASTRUCTURE**

Mobile, fixed network, cloud laaS and M2M



#### **AGILE WORKPLACE**

Smartphone, tablet, notebook and office software



#### **BUSINESS APPLICATIONS**

Horizontal, vertical and cloud SaaS

## **MITTELSTANDSINITIATIVE 2.0: SECURE ICT SOLUTIONS FOR SMB**

### B2B market leadership driven by digitalization

MITTELSTANDS-INITIATIVE

1.0

2014-2017

Growth in mobile & broadband revenues

CAGR 2014–2017 +1%

• IT solutions:

SAP & cloud infrastructure for SMB with automatic provisioning

+19%

Business connectivity solutions

+11%

• Security: Mobile security & firewall solutions

+17%







Further growth in mobile & broadband

Connectivity & infrastructure: M2M/IoT

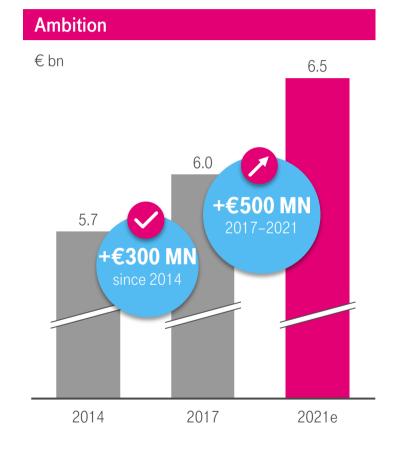
Agile workplace: Cloud PBX & office solutions

ICT solutions & business applications









### **3 LEAD IN TECHNOLOGY**



### **Drivers for network leadership**



#### **FIBER ROLLOUT**

FTTH/B rollout with intelligent area and technology mix within stable Capex envelope



#### **COOPERATION & CO-INVEST MODELS**

Increase of coverage with intelligent cooperation models



#### **MOBILE**

Extension of leading mobile network position in reach and quality

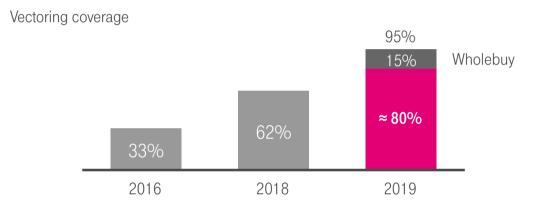


#### **NETWORK INNOVATION**

Innovation leader in 5G network technology and efficient rollout technology

# **II FIBER ROLLOUT: NOT MANY WHITE SPOTS LEFT**

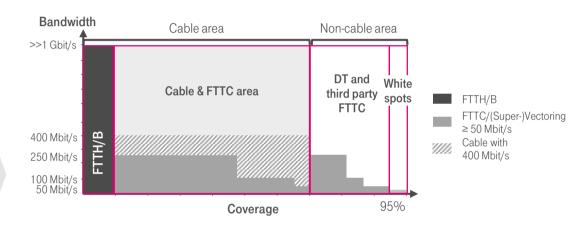
#### TDG building the leading infrastructure in Germany



- Reaching  $\approx$  80% HH coverage with vectoring in 2019 ( $\approx$  62% in 2018)<sup>1</sup>
- ≥100 Mbit/s in 70% of HH (in 2019)
- Introduction of Super-Vectoring (up to 250 Mbit/s)
- Wholebuy potential 15% (in 2019)

15 MN
homes connected
with Super-Vectoring
by end of 2018

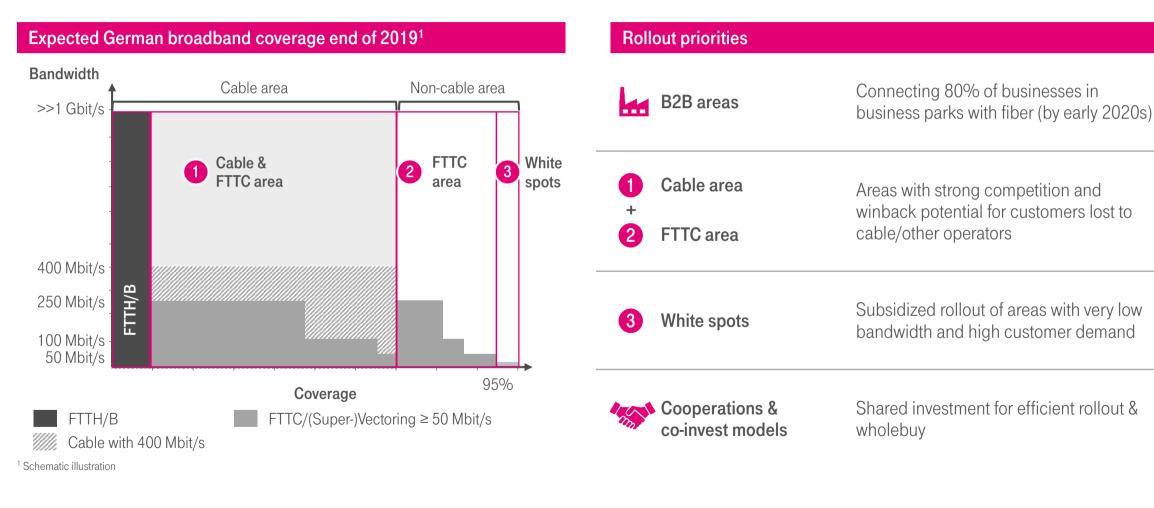
### Expected market broadband coverage end of 2019<sup>2</sup>



- Only 5% "white-spots" end of 2019
- 70% coverage with 1 Gbit/s by cable expected
- Further subsidies expected

<sup>1</sup> Bandwidth ≥50 Mbit/s, delayed due to long regulatory process <sup>2</sup> Schematic illustratio

# **II FIBER ROLLOUT: SMART AREA AND TECHNOLOGY MIX**



# **EXECUTE:** COOPERATIONS AND CO-INVEST MODELS

#### **Cooperation models**



#### **JOINT VENTURES**

 Joint rollout of fiber infrastructure with larger regional carriers (e.g. EWE)



# RENTING NETWORK ELEMENTS

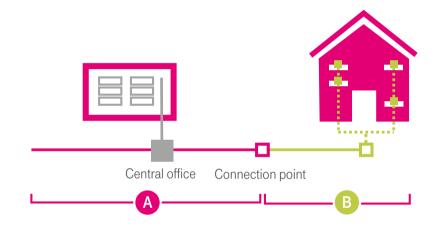
 Renting complementary infrastructure from regional players (e.g. municipal services)



#### **WHOLEBUY**

 Renting infrastructure & active equipment based on commercial wholesale models (market potential 15% in 2019)

#### Investment oriented & fair commercial models



# OPEN NETWORK, BASED ON FAIR RETURN, RISK SHARING, AND RECIPROCITY

- A Commitment Model with annual upfront payments for bitstream connection fee
- Investment oriented connection fee per line charged to retail service provider

# **13** FIBER ROLLOUT: RAMPING UP TO 2 MN HOMES PER YEAR

#### Guardrails fiber rollout



- Improving rollout efficiency with trenching, data driven rollout, and "FTTH factory"
- Status 2020: ≈ €1,000 per home passed¹



### SMART AREA & TECHNOLOGY MIX

- Smart area mix between B2B areas, competitive areas, FTTC areas and white spots
- Efficient technology mix with FTTH, FTTB and WTTH (potential: 20–30% of homes where we have fiber available)



#### SMART COOPERATION & CO-INVEST

- Joint fiber rollout with regional players (e.g. EWE)
- DT will sell and buy wholesale fiber access based on fair return, risk sharing and reciprocity

MAINTAINING **STABLE CAPEX €4.2 BN** P.A.<sup>2</sup>

MINIMUM IRR **7.5%**<sup>3</sup>

RAMPING UP TO

2 MN HOUSEHOLDS

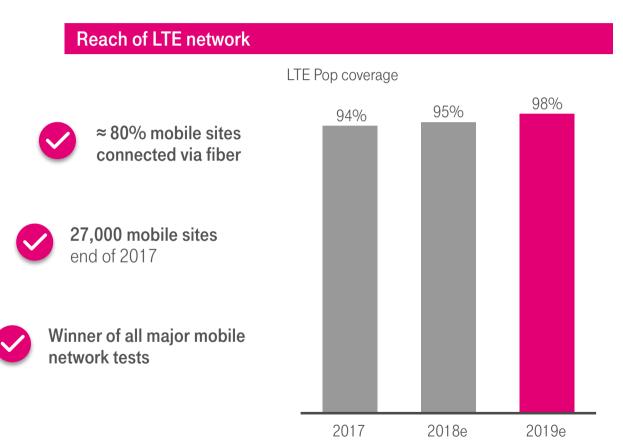
P.A. BY 2021

SHARING INVESTMENT RISKS
WITH PARTNERS

<sup>1</sup> Incl. area & technology mix <sup>2</sup> Stable total Cash Capex vs. 2017 <sup>3</sup> Internal Rate of Return for FTTB/H

# **MOBILE: BEST NETWORK IN GERMANY**





## **MOBILE: EXTENDING MOBILE LEADERSHIP POSITION**

### **Key priorities**



- Unprecedented site expansion (≈ 2,000 additional sites p.a.)
- Differentiation with customer driven rollout



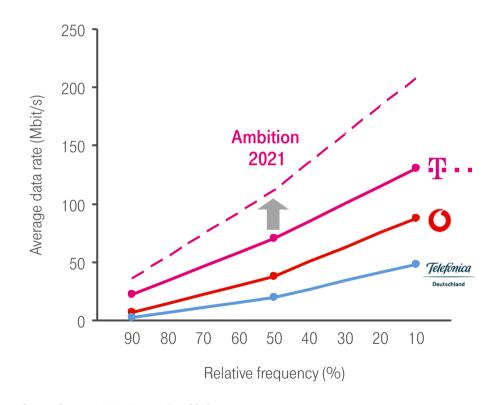
# QUALITY IMPROVEMENT

- Improve coverage of highways & train tracks
- Enhance indoor coverage & quality
- Extend lead in fiber backhaul.



- Top-speeds in city-centers of 1 Gbit/s
- Increase of capacity with massive MIMO
- Mobile Edge for low latency use cases

### Ambition: Best customer experience



Source: Connect Mobile Network Test 2018

# **13** NETWORK INNOVATION: FORERUNNER IN 5G TECHNOLOGY

#### 5G enabling new speed and efficiency levels

1,000x HIGHER NETWORK CAPACITY

10x LOWER LATENCY

10x HIGHER SPEED >10 Gbit/s

**4x** INCREASED EFFICIENCY €/Mbit/s as efficiency factor<sup>1</sup>

#### Pilot use cases with strong partners

WTTH/FWA POTENTIAL



- Trials successfully completed
- Capex savings potential through synergetic rollout with FTTH

5G PILOT CASES WITH STRONG PARTNERS





- Pilot cases already initiated
- Innovative solutions leveraging 5G features (e.g. drones, Augmented Reality, remote maintenance)

<sup>&</sup>lt;sup>1</sup> Network capacity costs per incremental busy hour capacity

### **4** VALUE TRANSFORMATION



### Key drivers for cost reduction



#### **AUTOMATION**

Data analytics and smart processes





Predictive servicing and maintenance, less complaints and process optimization





Retirement of platforms, investment in state-of-the-art infrastructure



#### **LEAN & AGILE ORGANIZATION**

Lean commercial and sales units, agile central functions and reduction of executive functions



<sup>&</sup>lt;sup>1</sup> Net cost reduction

# **AUTOMATION:** BOTS FOR CUSTOMER INTERACTIONS AND SIMPLIFYING PROCESSES

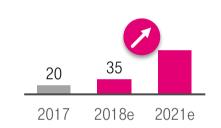


#### Key drivers for cost reduction



- Agile bot development to automize repetitive tasks
- Significant reduction of development time compared to traditional IT
- **1,500 bots** implemented in 2017

## Robot transactions, mn



### **Example: Field Service App**





- Chat bots for improved experience & efficiency in customer interaction
- Al supported chat to improve service experience

# Customer interactions with digital assistants,



- E2E field service process in a single app
- Optimized processes and handover in technology & service
- Dynamic workflow to avoid manual errors

# **OPERATIONAL EXCELLENCE: IMPROVING SERVICE PROCESSES**



### Reduction of complaints through efficiency measures and self-service



Mein Magenta App as central contract management tool

#### **Self-Service**



Data analytics to solve occurring issues in advance

#### Reliability



017: 92% <sup>2</sup> Q1 2018: 66%, survey based on customer SMS feedback within 24 hours



Training of experts to solve requests in first contact

#### **Service Quality**





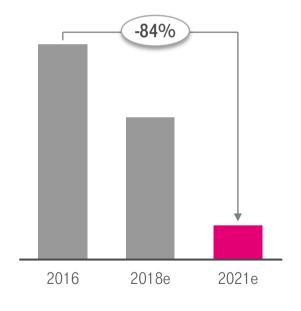
**Dedicated product teams** ensure end-to-end quality

### **Product Quality**



#### **Ambition**

Customer complaints per quarter



### 4 PLATFORM RETIREMENT: SIMPLIFICATION AND END OF LIFE



#### Key drivers for cost reduction



- Standardized production model for all access technologies
- BNG migration and IP transformation for mass market will be finished in 2019
- Retirement of multiple legacy transport platforms and closing of locations



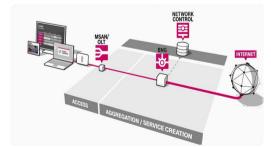
- Micro-service architecture and increased use of open source technologies
- Decoupling of architecture and retirement of older IT platforms
- Agile methodologies to improve delivery time

#### **Example: BNG transformation**

#### Legacy architecture



#### Today's architecture



# LEAN AND AGILE ORGANIZATION: ACCELERATED DECISIONS AND IMPROVED COLLABORATION

#### Key areas of agile methods and organization



- Consolidation of management functions and reduction of hierarchy to foster accountability
- Introduction of product-tribes and skill-based chapters

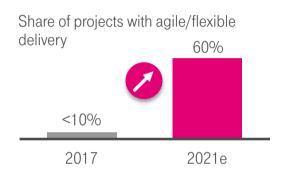


- Strong focus on software and product development
- Improve time to market by agile delivery processes
- Strong usage of Al & big data analytics



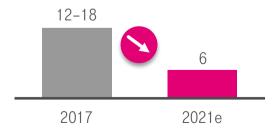
- Reskilling for future capabilities
- Agile methodology like scrum or design thinking as standard of collaboration
- Agile Academy launched in Jan 2018

#### Increased agility...



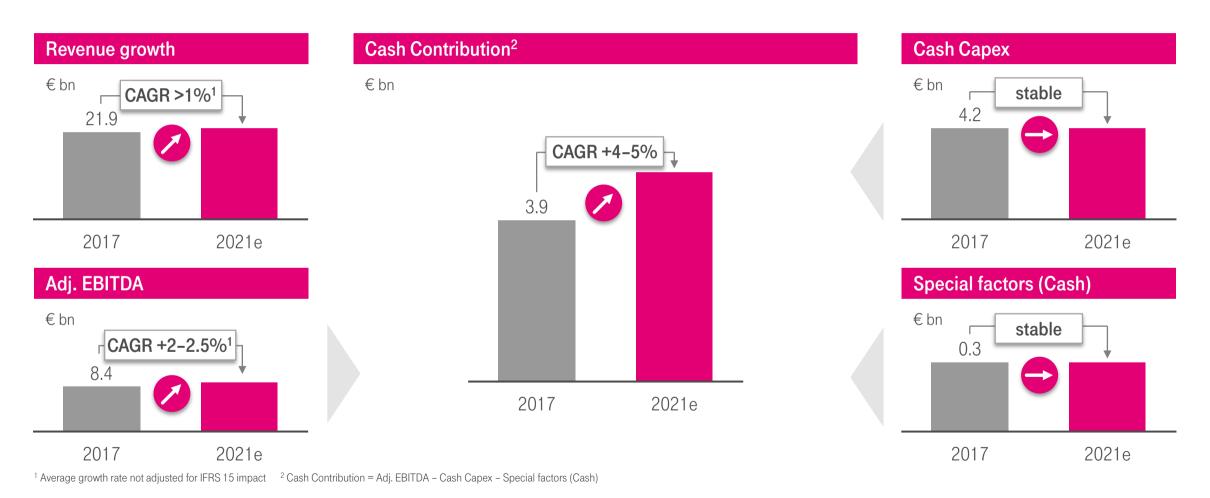
#### ... for faster time to market

Average delivery time of software projects, months



## FINANCIAL OUTLOOK

## FINANCIAL OUTLOOK



# MID TERM AMBITION LEVEL

## **MID TERM AMBITION LEVEL**

	Mid term ambition level	Year
LEAD IN CUSTOMER EXPERIENCE	■ #1 in <b>Mobile</b> service revenue: CAGR ≈ +2% <sup>1</sup>	2017-2021e
	■ #1 Broadband revenue: CAGR +3-4%²	2017-2021e
	■ MagentaEINS share of broadband households: ≈ 30%	2021e
LEAD IN BUSINESS PRODUCTIVITY	<ul> <li>Growing B2B revenues by +€500 mn</li> </ul>	2017-2021e
LEAD IN TECHNOLOGY	<ul><li>Ramping up to 2 mn households p.a.</li></ul>	by 2021e
VALUE TRANSFORMATION	■ Reduction of <b>Indirect cost</b> by €750 mn (net)	2017-2021e
FINANCIALS	■ Growing <b>Revenue</b> : CAGR > 1% <sup>3</sup>	2017-2021e
	■ Growing adj. <b>EBITDA</b> : CAGR +2-2.5% <sup>3</sup>	2017-2021e
	■ Growing <b>Cash Contribution</b> <sup>4</sup> : CAGR +4–5%	2017-2021e

<sup>&</sup>lt;sup>1</sup> Average growth rate adjusted for IFRS 15 impact <sup>2</sup> Including business IP products (e.g. DLAN, Company Connect); average growth rate adjusted for IFRS 15 impact; growth 2017–2021e without definition change approx. 1pp lower <sup>3</sup> Average growth rate not adjusted for IFRS 15 impact <sup>4</sup> Cash Contribution = Adj. EBITDA – Cash Capex – Special factors (Cash)

# SYSTEMS SOLUTIONS

**ADEL AL-SALEH** 

## **KEY MESSAGES**

TRANSFORMATION STILL UNDER WAY

T-Systems has struggled with growth and profitability, however, since the 2015 CMD has invested heavily in transforming its portfolio (growth topics and All-IP), and de-risking legacy contracts.

PORTFOLIO WITH STRENGTHS AND WEAKNESSES

T-Systems portfolio consists of telecommunications (TC), classic IT, and multiple growth offerings; in most, but not all, of its offerings T-Systems has a clear right to play and proven track-record.

**N2** STRATEGY: EVOLVE PORTFOLIO

T-Systems strategy focuses on successful transition of the business to digitalization and growth areas, while further strengthening our TC business and managing the decline in legacy segments.

ACCELERATE THE TRANSFORMATION

Four transformational streams launched to address business challenges, reinvigorate sales, and substantially improve profitability.

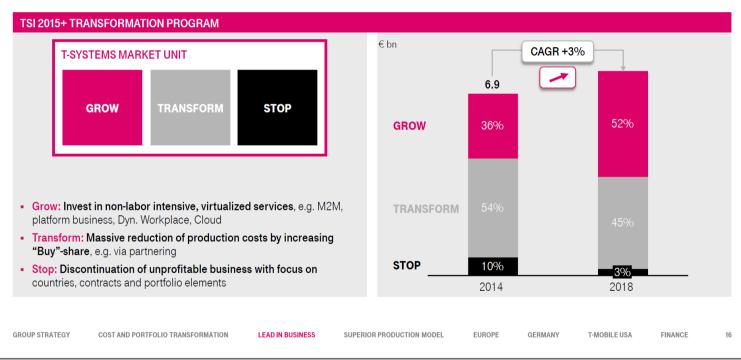
FINANCIAL OUTLOOK

We are confident to grow our EBITDA 2017–2021 and generate a positive cash contribution from 2020.

## **REVIEW 2014 - 2018**

### WHAT HAPPENED TO THE OLD PLAN?

## CHANGE OF REVENUE MIX AND INCREASED PROFITABILITY ARE THE KEY ELEMENTS OF TSI 2015+



#### What we delivered

- Stopped more than 20 bad contracts
- Addressed three major loss contracts
- Invested in growth areas

#### What went wrong

- **Execution** of transformation plan
- Compromise in cost reductions
- Weak portfolio management discipline
- Inefficient organization structure

## CHALLENGED PERFORMANCE IN A COMPETITIVE MARKET

#### **Ambition level 2018 Achievements 2017** Delivered/on track **FINANCIALS** Revenue TSI > 1% CAGR (2014–2018e) expected -1.5% CAGR (2014–2017) [pro forma: CAGR > 2%] Adj. EBIT margin TSI around 6% (2018e) **1.7%** [pro forma: $\approx 7\%$ ] ■ €126 mn Adj. cash contribution TSI positive from 2017 [pro forma: ≈ €500 mn] **QUALITY** Maintain TRI\*M index above peer average at current levels ■ 88 points (+4pts) of 84 points

## **BUSINESS CHALLENGES & FOUNDATIONS TO BUILD ON**

#### Business challenges

#### **REVENUE**

- Impacted by classical IT erosion, not compensated by new growth areas
- Sales set-up/structure/tools and processes, capability gaps, internally focused

#### LOSS MAKING CONTRACTS

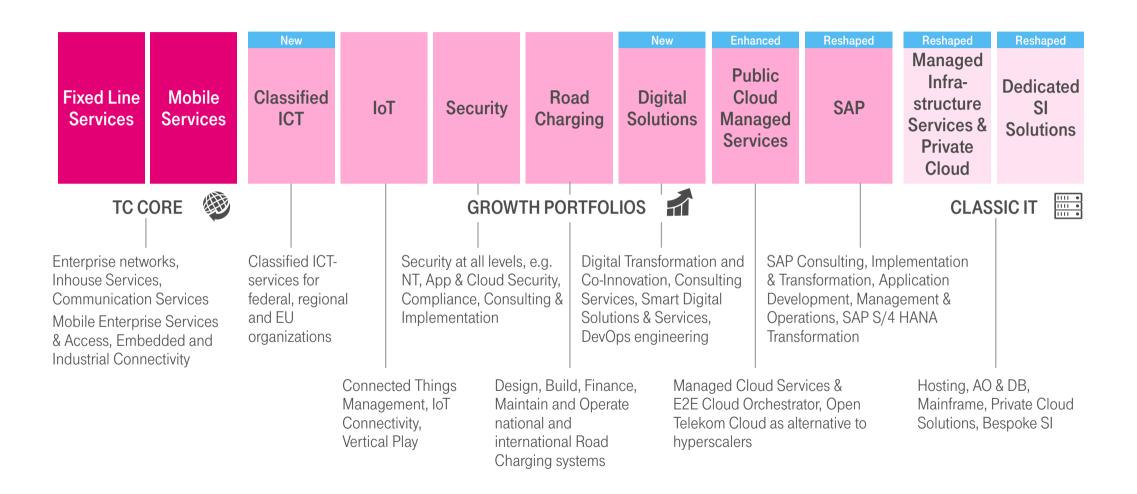
- Three years of abnormal loss levels
- Risk management upgraded
- Improved focus on implementation and transition periods

#### **COST STRUCTURE**

- G&A too high relative to our size
- Cost of delivery a challenge

## Strong foundations to build on MARQUE CLIENTS **NETWORK AND TELECOMMUNICATION ASSETS/CAPABILITIES BREADTH OF PORTFOLIO SKILLS & EXPERTISE INVESTMENTS IN GROWTH AREAS COMMITTED EMPLOYEES**

## **NEW PORTFOLIO STRATEGY DEFINED**



## STRATEGY 2018 - 2021

## FOUR TRANSFORMATIONAL INITIATIVES TO ADDRESS CHALLENGES



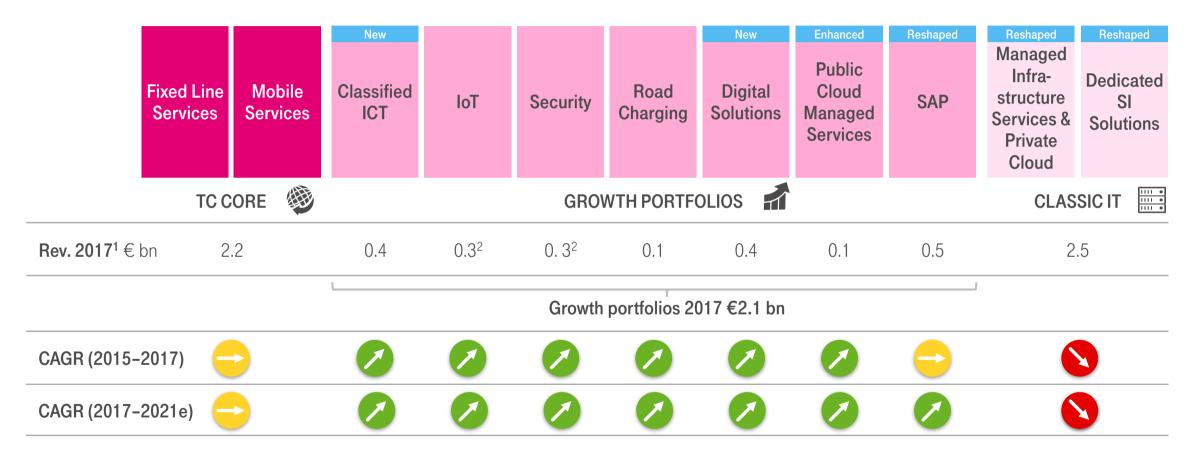
### **II** PORTFOLIO: SIGNIFICANT CHANGE BY PORTFOLIO MANAGEMENT

#### Portfolio focus

- PORTFOLIO-ORIENTED BUSINESS MANAGEMENT
   Creation of portfolio units with full accountability and P&L responsibility
- PORTFOLIO STRATEGY evaluated via four lenses
- **CLEAR STRATEGY** for each offering, including invest, divest, M&A
- MANAGEMENT SYSTEM and measurements in place to support new model



## **II** PORTFOLIO: REVENUE EQUALLY SPLIT BETWEEN THREE CLUSTERS



<sup>&</sup>lt;sup>1</sup> Revenue different from reported TSI segment view, due to further entities and intragroup charges <sup>2</sup> DT-View

### **II** PORTFOLIO: INTERNET OF THINGS

#### Integrated platform built on our connectivity

- Emerging multi-billion market, growing at +20%
- DT revenue today at €0.3<sup>1</sup> bn, growing > 20% p.a.
- Platform from connectivity to big data
- 5G/NB-loT enabling technologies
- Strategic partnerships (Azure, SAP, Software AG, vertical solutions)

#### Client example

## European market leader in property damage restoration

- E2E condition monitoring solution for digitalizing management
- Easy retrofit solution with tailored plug & play meteringbox, managed connectivity, device management & service concept
- From idea to implementation in < 2 years

Further customers









<sup>1</sup> DT-View

### **11** PORTFOLIO: SECURITY

#### **Becoming leading European provider**

- Dynamic-growth market with 8% growth
- Double-digit growth since launch, now revenue at €0.3¹ bn, growing > 10% p.a.
- > 1,400 security experts German leader
- Largest security operations center

Selected Partners









#### Client example



World leading supplier of industrial, process and specialty gases

- Outsourcing of worldwide Security operation center
- Complete level 1 & 2 monitoring in the Security incident & event monitoring (SIEM) for all locations worldwide
- Operation & engineering of SIEM platform
- Customer is highly satisfied with Telekom Security performance and customer centricity

<sup>1</sup> DT-View

## **11** PORTFOLIO: DIGITAL SOLUTIONS

#### Support European enterprises on their digital journey

- Multi-billion market growing double digit
- €0.4 bn revenue, expected growth of 10% p.a.
- End-to-end digitalization from ideation and innovation to integration
- 4,800 digitalization experts

#### Client example

#### Large international computer manufacturer

- Order picking system based on smart glasses, providing warehouse pickers with all the information about the next component at the right time
- From cloud to data glasses to strive for reduction of operating times, human errors & facilitation of complex processes.

#### Further customers









## **II** PORTFOLIO: DIGITAL SOLUTIONS



**GROWTH & SUCCESS** 

4,000

Implemented Digital Projects 2017



**EXPERTISE & COMPETENCE** 

4,800

Digitalization Experts



370

IoT Solution & Integration Experts



280

Data Analyst & Big Data Experts



Enabling Technologies
Experts



Digital Platform & Architecture Experts



(Co-)Innovation & Digital Change Experts



470

Mobile and Network Solutions Experts



**720** 

(General) Management Consultants and Digitalization Experts



830

Industry Digitalization
Consultants & Experts



**730** 

Cloud Transformation and Integration Experts



**450** 

Agile/DevOps Experts

### **II** PORTFOLIO: SAP

#### Capitalize on SAP's market growth

- Recognized market leader in Germany
- **€0.5 bn revenue**, 1%–2% growth today, expected to grow > 5% p.a. going forward
- Lead SAP S/4 HANA transformation
- Lead SAP in public cloud
- SAP on open Telekom cloud certified

#### Client example

## Europe's largest bus manufacturer implements SAP S/4HANA

- Migration of SAP R/3 to SAP S/4HANA as part of the client's business process modernization program
- Transformation follows agile approach based on combination of SAP's and T-Systems' best practices
- Client's benefits: increasing speed and innovation taking proactive actions throughout complete production process

Further customers









## **II** PORTFOLIO: SAP



**EXPERTISE & COMPETENCE** 

4,000

SAP experts



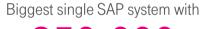
6.7 MILLION

SAP users



10,000

SAP instances





SAPS

Largest SAP hosting provider



HANA database



**15** 

Global competence centres

## 2 SALES: HOW WE EXECUTE BETTER IN SALES

#### Sales revitalization

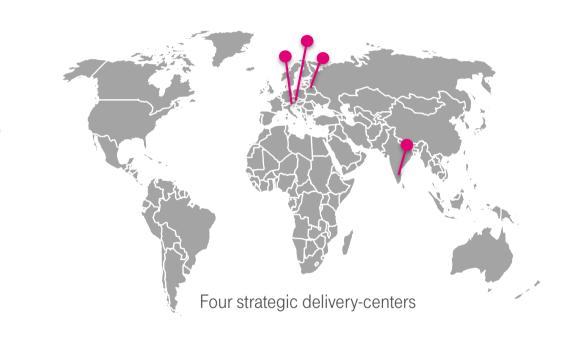
- Integrated sales and go-to-market organization Responsible for entire portfolio, supported by portfolio sales specialists
- Return to significant signings per year > €6 bn
- Drive client centricity → Increase client facing time + 25%
   Structured/consistent sales management approach
- Simplify and Improve tools and processes



## **B** DELIVERY: HOW WE EXECUTE BETTER IN DELIVERY

#### **Delivery integration**

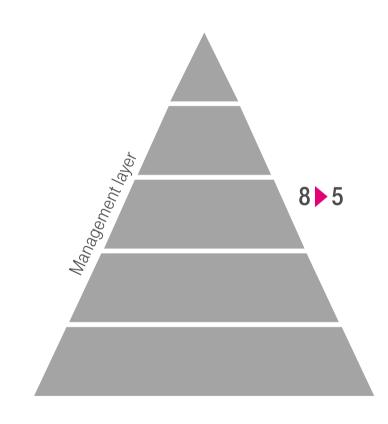
- Integrate delivery functions within the portfolio units, creating end to end cost transparency and clear ownership
- Cross delivery function driving standardization, automation and tooling → saving > €100 mn
- Digitalizing client interfaces and workflows
- Cross delivery function to manage and drive right-shoring-strategy → saving > €100 mn



## **41** OVERHEAD: LEAN OVERHEAD SUPPORTS OUR AMBITION

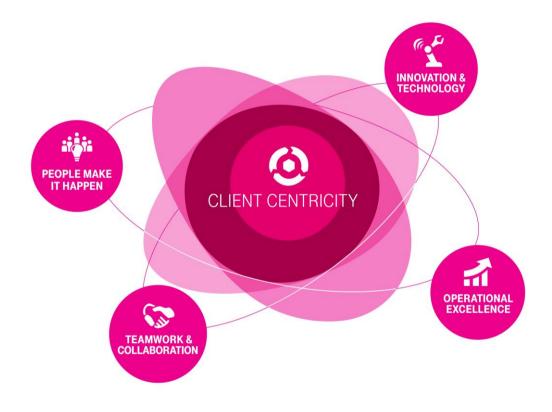
#### Overhead reduction

- Simplify central functions & general administration, processes and structure
- Reduction of management layers
- Create agile organization designs, fit for growth areas, and efficient structures for mature areas
- Cost saving > €100 mn



# TRANSFORMATION SUPPORTED BY FIVE BUSINESS PRINCIPLES AND CHANGE MANAGEMENT PROGRAM





### STRONG MANAGEMENT SYSTEM & CHANGE MANAGEMENT PROGRAM

## LESSONS LEARNED FROM THE PAST HELP IMPROVE EXECUTION

#### From...

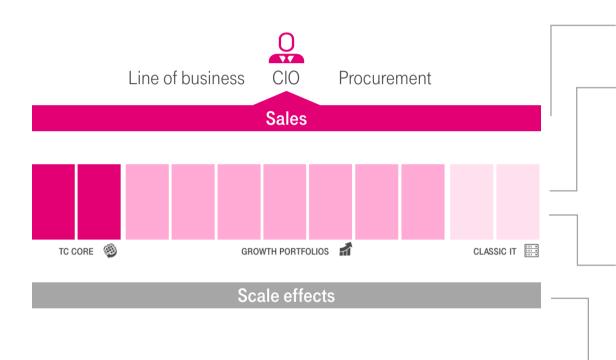
Revenue decline due to sales set-up and portfolio gaps

- Loss making contracts burden our results
- Good conceptual work, however not bold enough approach or execution
- Too little automation, offshoring and digitalization/standardization cost disadvantages
- Cultural change not explicitly targeted

#### To...

- New sales organization set-up. Strong initiative with new spirit, client centricity and opportunity tracking
- Clearly defined portfolio, focused on growth
- Implemented improved risk-management
- Rigorous execution with strong management team, new skills and capabilities
- Structured cost reduction program and current sense of urgency supports change and workforce-program
- Strong focus on mindset with new change management program

## T-SYSTEMS LEVERAGING FULL POTENTIAL



Integrated client approach

Growth portfolio benefits strongly from DT network ownership and IT capabilities, e.g.

- Leverage IT delivery capability and expertise in complex projects
- Leverage of client base to up-sell new solutions
- Leverage of network (5G, NB) capabilities across all growth areas
- Partnerships across portfolios (Microsoft, SAP, Cisco, Huawei)

Complementary portfolio offerings enable cross-sell and upsell, e.g.

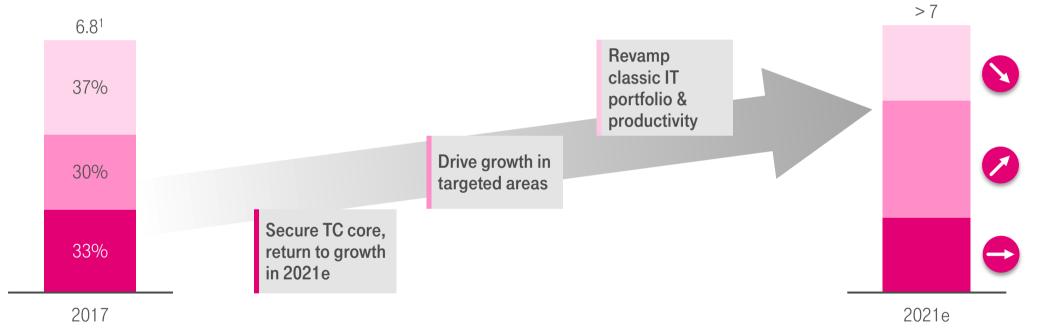
- Security as fundamental component to all offerings and contracts
- Digital solutions as tip of the arrow and integrator of TSI portfolio

Breadth of portfolio enables scale effects, e.g.

offshore-center, marketing spend, sales force size & innovation labs

## STRATEGY EXECUTION TO EVOLVE OUR REVENUE MIX

## New revenue mix as result of our strategy – Leveraging our core and legacy to drive growth in new areas



<sup>&</sup>lt;sup>1</sup> Revenue different from reported TSI segment view, due to further entities and intragroup charges; Security and IoT DT-View

## SOUND PROFITABILITY-BASIS THROUGH > €300 MN SAVINGS

#### Measures

- Delivery right-shoring-strategy
- Delivery standardization, automation and tooling
- Overhead reduction

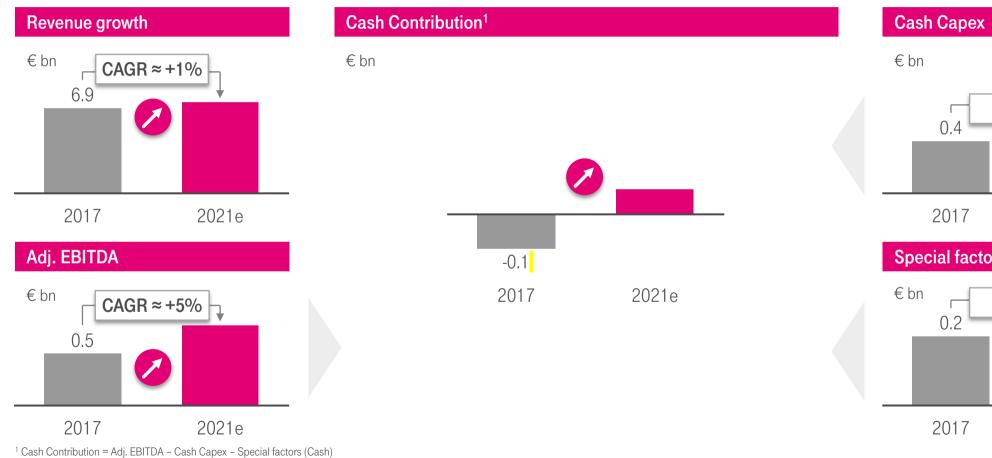
#### **Gross-savings**

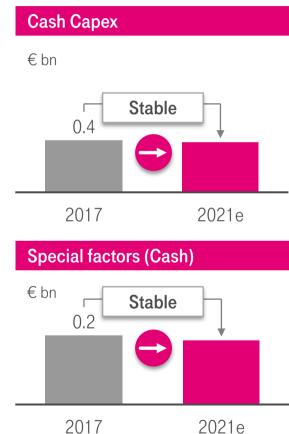
- >€100 mn
- >€100 mn
- >€100 mn

> €300 MN

## FINANCIAL OUTLOOK

## **FINANCIAL OUTLOOK**





# MID TERM AMBITION LEVEL

## **MID TERM AMBITION LEVEL**

	Mid term ambition level	Year
FINANCIALS	<ul><li>Growing revenue: CAGR +1%</li></ul>	2017-2021e
	Growing adj. EBITDA: CAGR ≈ +5%	2017-2021e
	<ul> <li>Adj. EBITDA margin: 8–10%</li> </ul>	2021e
	<ul> <li>Cash Contribution<sup>1</sup> breaking even</li> </ul>	2020e
QUALITY	Maintain TRI*M index above peer average at current level	Above 80 points in 2021e

<sup>&</sup>lt;sup>1</sup> Cash Contribution = Adj. EBITDA - Cash Capex - Special factors (Cash)

# **TECHNOLOGY & INNOVATION**

**CLAUDIA NEMAT** 

## **KEY MESSAGES**

SUPERIOR PRODUCTION MODEL

We are entering the final stages of our peer leading superior production model. While we have learned lessons on the way, we can broadly confirm financial and customer experience benefits.

**N** LEAD IN 5G

We will leverage our superior fiber networks and modernized SRAN to lead in 5G. Within an overall stable CAPEX envelope, we will focus on:

- 1) smart capacity/speed upgrade
- 2) FWA
- 3) selected new products/solutions.

**ACCELERATED DIGITALIZATION** 

Our agile approach to IT transformation will enable accelerated digitalization for better customer experience and lower cost in accordance with the superior production model.

104 LEAD IN CUSTOMER EXPERIENCE AND BUSINESS PRODUCTIVITY

To lead in customer experience and business productivity, we have market proven innovations and a compelling innovation pipeline going forward.

# **REVIEW 2014 - 2018**

## **REVIEW 2014-2018**

	Ambition level 2018	Achievements 2017	Delivered
ALL-IP TRANS- FORMATION	<ul> <li>All integrated countries 100% IP-based</li> </ul>	<ul> <li>Slovakia, Croatia and Hungary 100%, Greece 45% (100% in 2019¹)</li> <li>Germany 67% (consumer 100% in 2019, business finished in 2020)</li> </ul>	
PAN-EUROPEAN NETWORK	<ul> <li>Backend and frontend data centers set up</li> <li>Geo-redundant Network Operations Centers established</li> <li>Services fully migrated to Pan-Net</li> </ul>	<ul> <li>Backend data centers in Hungary and Poland in 2017, Greece in 2018. Frontend according to roll-out plan</li> <li>Set up in Romania and Germany</li> <li>Selected services migrated</li> </ul>	
INTEGRATED NETWORK STRATEGY	<ul> <li>LTE pop-coverage Germany &amp; Europe: 75%–95%</li> <li>Germany: ≈ 80% Fixed high speed internet HH coverage ≥ 50 Mbps²</li> <li>Europe: ≈ 50% Fixed high speed internet HH coverage ≥ 100 Mbps</li> </ul>	<ul> <li>Germany 94% and Europe 94%</li> <li>≈ 80% HH vectoring coverage in 2019</li> <li>32%</li> </ul>	

<sup>&</sup>lt;sup>1</sup> Intentional postponement by one year in Greece to refocus invest on access <sup>2</sup> Depending on regulatory adjustments

## SUPERIOR PRODUCTION MODEL- SUCCESSES/LESSONS LEARNED

## **Digital Transformation**

 Our shift towards an agile approach to IT transformation with upside on customer experience and lower cost in accordance with promised savings



We confirm
CMD 15
gross cost savings
of €1.2 bn for early
2020ies as well as
customer experience
benefits

## **ALL IP Migration**

- Peer leading IP migration
  - Scope: Simplification across all (!) layers
  - Achievements: Complete or close to completion in all major markets
- We see clear customer experience benefits and network cost savings

## **PAN-European Network**

- Modified approach: Focus on value creation through virtualization and cloudification
- We centralize services only when it accelerates time to market

## **Integrated Network Leadership**

- Clear differentiation by integrated networks:
   We create the basis for FMC commercialization
- Superior fiber backhauling: We have a competitive advantage for 5G experience
- Mobile technology leadership in Germany and in 9 out of 12 European countries: We create a better customer experience and can monetize it

## **CUSTOMER BENEFITS OF ALL IP MIGRATION ARE PROVEN**

#### **Customer benefits**

## Precondition for plug & play

- Auto-provisioning (without filling in credentials)
- Improved customer satisfaction regarding provisioning



#### **Fewer incidents**

• 38% fewer tickets in provisioning

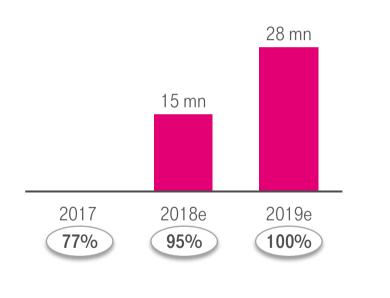
## Massive speed uplift

- Simplification of aggregation network layer (BNG) as basis for product innovation
- Example: 250 Mbps Super Vectoring product



## BNG migration as basis for (Super) Vectoring

# of Super Vectoring homes passed/BNG migration quota



Super Vectoring homes passed

% BNG migration quota

## INTEGRATED NETWORK LEADERSHIP IN GERMANY AND EUROPE

## Mobile network leadership for best customer experience































P3 Benchmark 2017:

Mobile technology leadership in 9 of 12 countries

































Connect Test 2017

## Fiber advantages - status 2017

#### **GERMANY**

- 455,000 km fiber (+60,000 km in 2018)
- ≈ 80% fiber backhauling further increasing, becoming even more relevant with 5G

#### EUROPE1

- 240.000 km fiber
- Exemplary fiber backhauling of 74% in Croatia, 51% in Romania and 47% in Slovakia and Hungary



1 w/o TM NL

# STRATEGY 2018 - 2021

## **TECHNOLOGY & INNOVATION AMBITION**

## **Our strategy GROW** LEAD IN CUSTOMER I FAD IN LEAD IN BUSINESS **EXPERIENCE TECHNOLOGY PRODUCTIVITY** ONE CONNECTIVITY **INTEGRATED** SECURE ICT SOLUTIONS & PERFECT SERVICE **GIGABIT NETWORKS** & BIG IOT **SAVE FOR GROWTH INVESTMENTS** SIMPLIFY, DIGITALIZE, ACCELERATE

## Our Technology & Innovation contribution

- 1 LEAD IN TECHNOLOGY
  - Integrated network leadership: Fiber build out and leadership in mobile experience<sup>1</sup>
  - Smart 5G leadership
- 2 VALUE TRANSFORMATION
  - Broadband production innovation to drive Opex and Capex efficiencies, IP-migration completion
  - Agile approach towards IT transformation to accelerate digitalization
- 3 LEAD IN CUSTOMER EXPERIENCE AND BUSINESS PRODUCTIVITY
  - Market proven innovations in B2C and B2B with compelling innovation pipeline going forward

<sup>&</sup>lt;sup>1</sup> Covered in segment chapters

## **11** WE WILL DEPLOY 5G SMARTLY







#### **CAPABILITY**

## APPLICATION AREA

## **ECONOMIC**RATIONALE

- Enhanced mobile broadband
- Starting with areas of interest (cities, campus networks; as overlay on 4G)
- More efficient than 4G from 2021 onwards

- Gigabit speed on higher frequencies/millimeter waves
- Complement to FTTH/B in (sub-) urban areas
- Depending on topology, more costefficient than FTTH/B, faster time to market

- Massive IoT
- Low latency, QoS
- In selected areas of interest
- Enable new revenue streams

## **11** ENHANCED MOBILE BROADBAND

## From today's LTE networks ...



#### **Current frequencies**

800 MHz/900 MHz/1800MHz/2.1 GHz/2.6 GHz

#### MIMO (multiple input multiple output)

 2T2R, 4T4R or even 8T8R antenna architecture without usage of massive MIMO

#### Radius of cell coverage

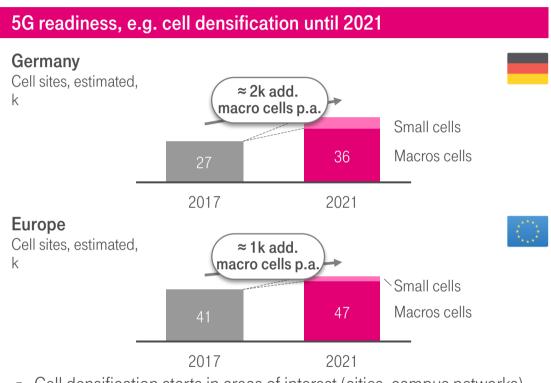
- Radius of higher frequencies physically lower
- In a standardized environment the radius of 1.8 GHz is two times bigger compared to 3.5 GHz

## ... towards a broader 5G ecosystem

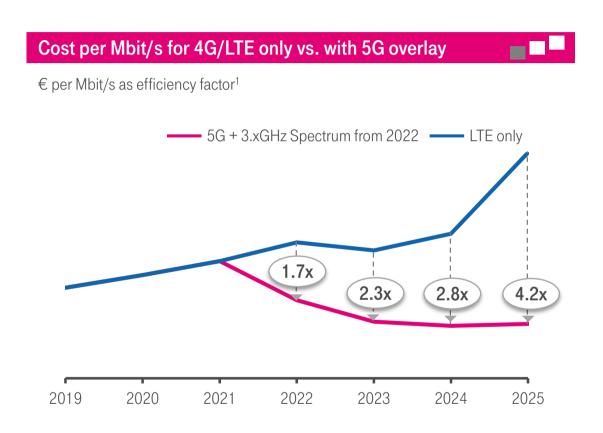


- ... will be enlarged by use of additional spectrum bands
- 700 MHz and especially 3.x GHz
- ... and the evolution towards massive MIMO
- Massive MIMO architecture typically 64T64R on 3.5 GHz within a practical size/dimension of the whole antenna
- ... lower on 3.5 GHz but optimized by beamforming and smaller cells
- Active antenna technology, massive MIMO and dynamic beamforming optimize coverage and minimize the impact of a reduced radius of cell coverage

## **11** GETTING READY FOR 5G TO LEVERAGE FUTURE EFFICIENCIES



- Cell densification starts in areas of interest (cities, campus networks)
- Superior fiber backhauling and SRAN



<sup>&</sup>lt;sup>1</sup> Network capacity costs per incremental busy hour capacity, assuming annually increasing traffic demand of 45%

## **III** WITH 5G FWA, WE CAN PROVIDE GIGABIT SPEED FAST

## We trialed FWA in different topologies of Germany ...







## ... with promising results



#### **Explanation**

- Millimeter wave frequencies 26 (licensed) and 60 (unlicensed) GHz
- Enables Gigabit speeds
- Number of HH depends on topology (line of sight is mandatory)
- Designed to be at least competitive with cable

#### **Benefits**

- Initial Capex demand 30–50% of FTTH/B. Only after 20 yrs. TCO of FTTH/B more favorable due to higher annual OPEX for FWA
- Faster time to market
- Less underground construction capacity needed
- Equipment reusable
- De-risking fiber roll-out

20-30% of HH where fiber is available in the streets

## **11** CAMPUS NETWORKS ARE FIRST SOLUTIONS WITH 5G/EDGE



## Potential 5G application areas:

## (Multi-) Local

- CAMPUS NETWORKS
- Information augmented visions
- Immersive media, event-driven
- (Decentral) energy management

## ... and beyond:

- Connected drones
- Emergency health care

## **II** REAL TIME ECONOMY OPENS BOUNDLESS OPPORTUNITIES

2018

2019

2020

2021

2022

2023 2024 2025 2026 2027 2028

## Today...

- Humans experience the internet via app or browser on certain devices
- Computing power, storage and algorithmic intelligence hosted in central data centers or on the devices. (PC, smartphone, car, etc.)
- Connectivity experience differentiates via speed and coverage

#### ... and in the future

- ... also experience connectivity naturally according to human senses (via voice recognition, ear plugs, lenses, glasses, textiles, etc.)
- ... also in (edge) clouds deeply embedded into the networks

... also via low latency, precise positioning, security and massive IoT

## **2** BROADBAND PRODUCTION INNOVATION DRIVES EFFICIENCY

## **Examples**

## AUTOMATED FIBER ROLL-OUT PLANNING

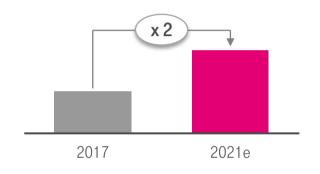


## **Description**

- 3D surface planning put into point cloud
- Applying machine learning
- Generating automated passive infrastructure planning
- Pilot starts in Q3/2018

## **Impact**

Increase of planning productivity by FACTOR TWO



#### "ACCESS 4.0"

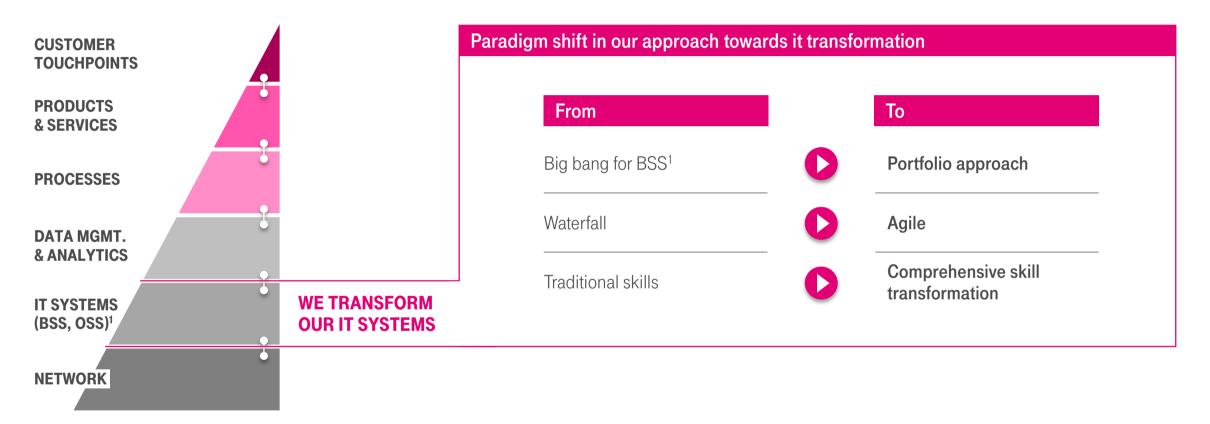


- Ongoing R&D project to split software and hardware components in wireline like OLT<sup>1</sup> + MSAN ("access virtualization")
- Potential partnering discussions started

 IT will disrupt current ecosystem of OEMs (massively lower procurement prices)

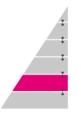
<sup>1</sup> OLT = Optical line termination: the endpoint of our passive optical network, mostly located in street cabinets

## **12** IT TRANSFORMATION ENABLES ACCELERATED DIGITALIZATION



<sup>&</sup>lt;sup>1</sup> BSS: Business Support System/OSS: Operations Support System

# 2 NEW PORTFOLIO APPROACH REDUCES TRANSFORMATION COMPLEXITY



#### From

Attempt to replace legacy by big bang



Portfolio approach with strong business-IT alignment



Selective Greenfield



- Agile scrum teams for dedicated projects:
  - Fiber roll-out
  - Retail FMC
  - B2B FMC



- Design for single purpose
- High complexity



**Decoupling** 



Esp. customer touch points from the business support system





Modernization for bulk of systems by creation of reusable (Micro-)services

**Impact** 

... reduced delivery time

... mitigated risk (compared to big bang)

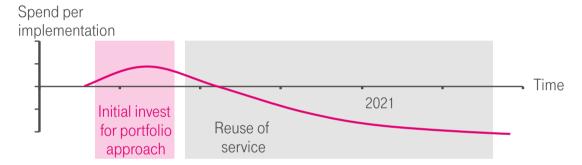
... higher reusability to reduce IT cost midterm

## **12** CLEAR IMPACT EXPECTED ESPECIALLY ON TIME TO MARKET

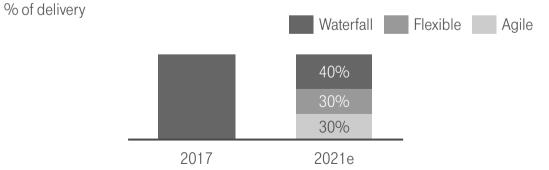




Initial invest for portfolio approach

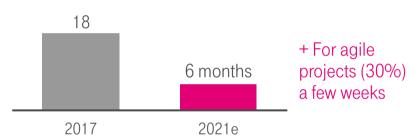


## Degree of delivery modernization,

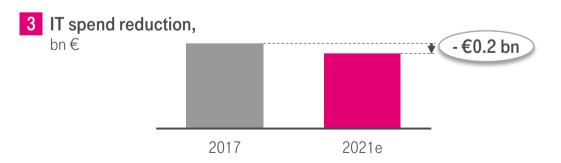


## Impact of IT transformation

1 Average delivery time,



2 Enabling process efficiencies in segments, % of delivery



## **B** LEAD IN CUSTOMER EXPERIENCE INNOVATION

## Market proven

## Entertain/TV

- 3.1 mn users in Germany, 4.2 mn in EU
- €2 bn revenues in Germany and EU

## **Hybrid router**

**370,000** users

#### **Smart Home**

- Launched in 7 countries
- 283,000 HH, 80% YoY growth in Q1 2018 in Germany



## Recently launched

## **Connect App**

- Launched in Germany, 1.4 mn users
- 3.9 (Android) and 4.3 (iOS) rating in app store

## **Inflight connection**

 Europe's first and only solution combining LTE and satellite

## To come in the future

- Smart speaker
- Voice control of Telekom services
- Integration of local partners

## Entertain over the top

TV for everybody

#### **Smart Glasses**

JV with Zeiss



## **B** LEAD IN BUSINESS PRODUCTIVITY INNOVATION

## Market proven

#### **NB IoT in 8 countries**

 200 projects with NB IoT applications, e.g., predictive maintenance solution for bridges, roads, buildings etc.

#### **Smart City projects**

In 10 countries



## Recently launched

## City pass

- White label solution for digital city services
- Blockchain based

#### **AR Maintenance**

 To enhance workforce capabilities esp. in field organizations

#### Soon to come

#### Campus networks

Leveraging 5G capabilities and edge cloud locally

#### **Connected drones**

Starting with drone detection on LTE

## **Energy Management**

 Piloting 5G capabilities for low voltage network steering





## **B** FINALLY, WE DRIVE CULTURAL TRANSFORMATION

## Global excellence in Technology & Innovation, e.g.

Claudia Nemat Lead





Walter Goldenits
Technology Germany

Alex Jinsung Choi Research & Technology Innovation





Omar Tazi Prod. Innovation & Customer Experience

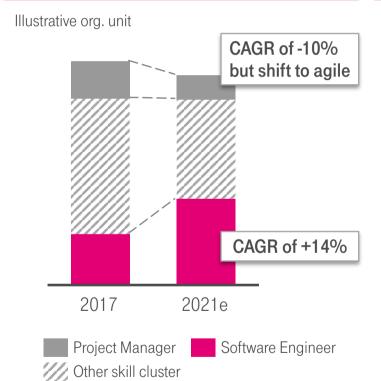
Peter Leukert Telekom IT





Jean-Claude Geha International Technology & Services

## Comprehensive skill transformation



## Agile working mode

Illustrative changes

- Reduction of organizational hierarchy level in innovation functions by 44%
- 50% of all people in VTI central functions will work in tribes/ squads instead of classical line organization
- Introduction of DevOps in Technology Germany

# MID TERM AMBITION LEVEL

## MID TERM AMBITION LEVEL

## TECHNOLOGY LEADERSHIP

# VALUE TRANSFORMATION

#### Mid term ambition level

- Gigabit rollout in Germany
- Gigabit rollout in EU
- Mobile network leadership in Germany
- Mobile network leadership in EU
- 5G innovation leadership
- IP transformation completed
- IT transformation

## Commitment/Year

- Ramp up to 2 mn HH p.a. by 2021
- Ramp up to 0.75 mn HH p.a. by 2021<sup>1</sup>
- Outdoor LTE coverage 99% in 2020 and leading in customer experience
- Outdoor LTE coverage 99% in 2021 and leading in customer experience
- Greece in 2019
- Germany B2C in 2019
- Germany B2B in 2020
- Delivery from 18 months today to 6 months on average in 2021
- IT spend reduction of €0.2 bn in 2021

<sup>&</sup>lt;sup>1</sup> FTTH/B and Cable ED3.1, excluding Romania

## **DEMONSTRATOR SESSION**

3 Topics presented simultaneously in Circuit Training Mode. Your individual starting point is printed on the back of your badge.

**AUTOMATION OF FIBER ROLLOUT PLANNING** 

5G NEW RADIO + **FIXED WIRELESS ACCESS** 

**AUGMENTED REALITY + EDGE COMPUTING** 

Pass by on the way to the Evening Event:

TRENCHING + HORIZONTAL **DIRECTIONAL DRILLING** 



- Use of Digitalization and artificial intelligence for planning of fiber rollout
- Benefit: Efficiency, speed, accuracy

Presented by: Walter Goldenits, CTO Germany



- 5G New Radio: Massive MIMO and beam forming
- Fixed Wireless Access Equipment
- Benefit: capacity and flexibility

Presented by: Antje Williams, Executive Program Manager for 5G





**EDGE** 

- Quality shift in rendering results with edge based vs. on-device rendering
- B2B use cases
- Benefit: Productivity, convenience

Presented by: Alex Choi, SVP Research & Technology Innovation



- Trenching Machine
- Horizontal Directional Drilling Machine
- Benefit for DT: Efficiency, speed

# T-MOBILE US

## **LEGAL DISCLAIMER**

#### Important Additional Information

In connection with the proposed transaction, T-Mobile US, Inc. ("T-Mobile") will file a registration statement on Form S-4, which will contain a joint consent solicitation statement of T-Mobile and Sprint Corporation ("Sprint"), that also constitutes a prospectus of T-Mobile (the "joint consent solicitation statement/prospectus"), and each party will file other documents regarding the proposed transaction with the U.S. Securities and Exchange Commission (the "SEC"). INVESTORS AND SECURITY HOLDERS ARE URGED TO READ THE JOINT CONSENT SOLICITATION STATEMENT/PROSPECTUS AND OTHER RELEVANT DOCUMENTS FILED WITH THE SEC WHEN THEY BECOME AVAILABLE BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION. When final, a definitive copy of the joint consent solicitation statement/prospectus will be sent to T-Mobile and Sprint stockholders. Investors and security holders will be able to obtain the registration statement and the joint consent solicitation statement/prospectus free of charge from T-Mobile or Sprint. The documents filed by T-Mobile with the SEC may be obtained free of charge at T-Mobile by requesting them by mail at T-Mobile US, Inc., Investor Relations, 1 Park Avenue, 14th Floor, New York, NY 10016, or by telephone at 212-358-3210. The documents may also be obtained free of charge from Sprint by requesting them by mail at Sprint Corporation, Shareholder Relations, 6200 Sprint Parkway, Mailstop KSOPHF0302-3B679, Overland Park, Kansas 66251, or by telephone at 913-794-1091.

#### Participants in the Solicitation

T-Mobile and Sprint and their respective directors and executive officers and other members of management and employees may be deemed to be participants in the solicitation of consents in respect of the proposed transaction. Information about T-Mobile's directors and executive officers is available in T-Mobile's proxy statement dated April 26, 2018, for its 2018 Annual Meeting of Stockholders. Information about Sprint's directors and executive officers is available in Sprint's proxy statement dated June 19, 2017, for its 2017 Annual Meeting of Stockholders, and in Sprint's subsequent reports on Form 8-K filed with the SEC on January 47, 2018. Other information regarding the participants in the consent solicitation of their direct and indirect interests, by security holdings or otherwise, will be contained in the joint consent solicitation statement/prospectus and other relevant materials to be filed with the SEC regarding the acquisition when they become available. Investors should read the joint consent solicitation statement/prospectus carefully when it becomes available before making any voting or investment decisions. You may obtain free copies of these documents from T-Mobile or Sprint as indicated above.

#### No Offer or Solicitation

This communication shall not constitute an offer to sell or the solicitation of an offer to buy any securities, nor shall there be any sale of securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction. No offering of securities shall be made except by means of a prospectus meeting the requirements of Section 10 of the U.S. Securities Act of 1933, as amended.

#### Cautionary Statement Regarding Forward-Looking Statements

This communication contains certain forward-looking statements concerning T-Mobile. Sprint and the proposed transaction between T-Mobile and Sprint. All statements other than statements of fact, including information concerning future results, are forward-looking statements. These forward-looking statements are generally identified by the words "anticipate," "believe," "estimate," "expect." "intend," "may," "could" or similar expressions. Such forward-looking statements include, but are not limited to, statements about the benefits of the proposed transaction, including anticipated future financial and operating results, synergies, accretion and growth rates, T-Mobile's, Sprint's and the combined company's plans, objectives, expectations and intentions, and the expected timing of completion of the proposed transaction. There are several factors which could cause actual plans and results to differ materially from those expressed or implied in forward-looking statements. Such factors include, but are not limited to, the failure to obtain, or delays in obtaining, required regulatory approvals, and the risk that such approvals may result in the imposition of conditions that could adversely affect the combined company or the expected benefits of the proposed transaction, or the failure to satisfy any of the other conditions to the proposed transaction on a timely basis or at all: the occurrence of events that may give rise to a right of one or both of the parties to terminate the business combination agreement; adverse effects on the market price of T-Mobile's or Sprint's common stock and on T-Mobile's or Sprint's operating results because of a failure to complete the proposed transaction in the anticipated timeframe or at all: inability to obtain the financing contemplated to be obtained in connection with the proposed transaction on the expected terms or timing or at all: the ability of T-Mobile. Sprint and the combined company to make payments on debt or to repay existing or future indebtedness when due or to comply with the covenants contained therein; adverse changes in the ratings of T-Mobile's or Sprint's debt securities or adverse conditions in the credit markets; negative effects of the announcement, pendency or consummation of the transaction on the market price of T-Mobile's or Sprint's operating results, including as a result of changes in key customer, supplier, employee or other business relationships; significant transaction costs, including financing costs, and unknown liabilities; failure to realize the expected benefits and synergies of the proposed transaction in the expected timeframes or at all; costs or difficulties related to the integration of Sprint's network and operations into T-Mobile; the risk of litigation or regulatory actions; the inability of T-Mobile. Sprint or the combined company to retain and hire key personnel; the risk that certain contractual restrictions contained in the business combination agreement during the pendency of the proposed transaction could adversely affect T-Mobile's or Sprint's ability to pursue business opportunities or strategic transactions; effects of changes in the regulatory environment in which T-Mobile and Sprint operate; changes in global, political, economic, business, competitive and market conditions; changes in tax and other laws and regulations; and other risks and uncertainties detailed in T-Mobile's Annual Report on Form 10-K for the fiscal year ended December 31, 2017 and in its subsequent reports on Form 10-Q, including in the sections thereof captioned "Risk Factors" and "Cautionary Statement Regarding Forward-Looking Statements," as well as in its subsequent reports on Form 8-K, all of which are filed with the SEC and available at www.sec.gov and www.t-mobile.com. Forward-looking statements are based on current expectations and assumptions, which are subject to risks and uncertainties that may cause actual results to differ materially from those expressed in or implied by such forward-looking statements. Given these risks and uncertainties, persons reading this communication are cautioned not to place undue reliance on such forward-looking statements. T-Mobile assumes no obligation to update or revise the information contained in this communication (whether as a result of new information, future events or otherwise), except as required by applicable law.

#### Non-GAAP

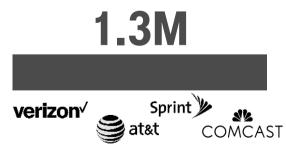
In addition to financial information prepared in accordance with U.S. GAAP, this presentation also contains adjusted financial measures that we believe provide investors and management with supplemental information prepared in accordance with U.S. GAAP, this presentation also contains adjusted financial measures are non-GAAP and should be considered in addition to, but not as a substitute for, the information prepared in accordance with U.S. GAAP. Further information relevant to the interpretation of adjusted financial measures, and reconciliations of these adjusted financial measures to the most comparable GAAP measures, may be found on T-Mobile's website at http://investor.t-mobile.com in the "Quarterly Results" section



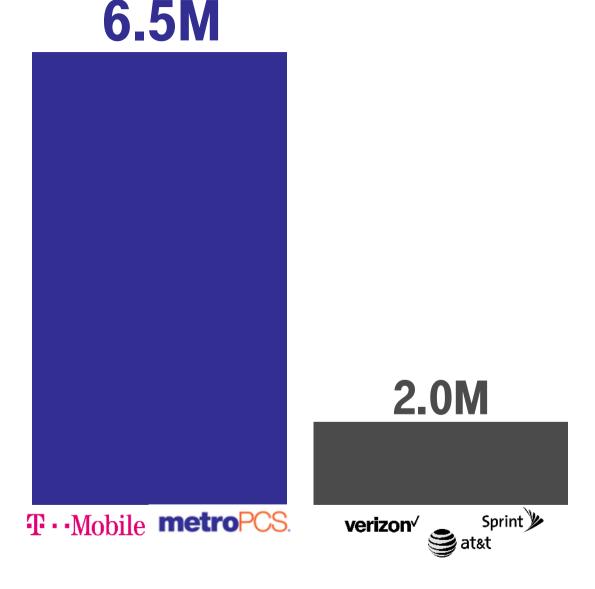


# **INDUSTRY POSTPAID PHONE GROWTH** LAST 5 YEARS





**INDUSTRY PREPAID GROWTH** LAST 5 YEARS

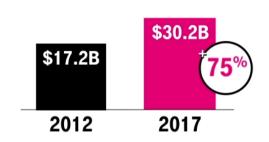




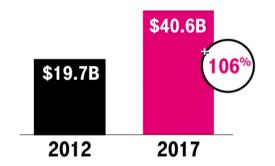


## INDUSTRY LEADING FINANCIAL GROWTH

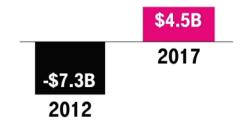
**SERVICE** REVENUES



**TOTAL REVENUES** 



**NET INCOME** 



\$4.9B (129%)
2012 2017

ADJUSTED **EBITDA** 

Financial results as reported



# **STANDALONE OUTLOOK** Q1 2018

## 2018 GUIDANCE<sup>1</sup>

**BUYBACKS** 

**BRANDED POSTPAID NET ADDS** 

2.6 - 3.3M

\$1.5B

**ADJUSTED EBITDA** 

\$11.4 - 11.8B

....

**INCREASED PROGRAM** 

INITIAL PROGRAM

(COMPLETED APRIL 2018)

\$7.5B

**CAPEX** (EXCL. CAP INTEREST)

\$4.9 - 5.3B

(CONTINGENT ON TERMINATION OF BCA WITH SPRINT)

**CF OPS CAGR** FY2016 - FY2019<sup>2</sup>

7 – 12%

FREE CASH FLOW CAGR FY2016 - FY20192 46 - 48%

**TOTAL BUYBACKS \$9.0B** 

**FAVORABLE TAX IMPACT** 2020 - 2027

\$6.5-7.0B

<sup>1</sup> We are not able to forecast net income on a forward looking basis without unreasonable efforts due to the high variability and difficulty in predicting certain items that affect GAAP net income including, but not limited to, income tax expense, stock based compensation expense and interest expense. Adjusted EBITDA should not be used to predict net income as the difference between the two measures is variable. In Q1 2018, we adopted the new revenue accounting standard. Including the estimated impact of such new revenue accounting standard, Adjusted EBITDA is expected to increase by an additional \$0.2 - \$0.5 billion for a total guidance range of \$11.6 - \$12.3 billion.

<sup>&</sup>lt;sup>2</sup> In Q1 2018, the adoption of the new cash flow accounting standard resulted in a reclassification of cash flows related to the deferred purchase price from securitization transactions from operating activities. In addition, cash flows related to debt prepayment and extinguishment costs were reclassified from operating activities to financing activities. In Q1 2018, we redefined Free Cash Flow to reflect the above changes in classification and present cash flows on a consistent basis for investor transparency. The effects of this change are applied retrospectively and are provided in the Reconcilitation of Non-GAAP Financial Measures to GAAP Financial Measures to Induced in our Q1 2018 earnings release.

# CUSTOMER EXPERIENCE OBSESSED

# CUSTOMER EXPERIENCE OBSESSED





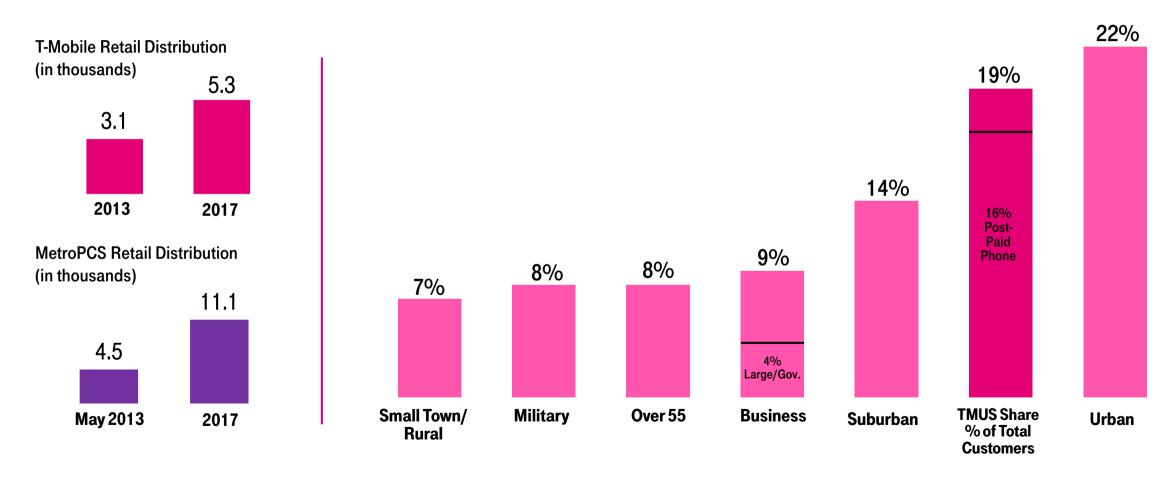


## **AMERICA'S BEST UNLIMITED NETWORK**

### **UN-CARRIER EVERYWHERE: NEW GEOGRAPHIES & SEGMENTS**

## **DISTRIBUTION EXPANSION Enabled by Network Expansion**

## PURSUING UNDERPENETRATED SEGMENTS (% market shares by segment)



## BEYOND THE SMARTPHONE GROWTH OUTSIDE OF CORE WIRELESS

### **HOME & ENTERTAINMENT**











- Music Freedom and BingeOn transformed mobile media consumption
- BingeOn Optimized video traffic, lowered network payload
- Exclusive partnership with Netflix launched September 2017
- Initial entry into rapidly converging media world led by seasoned team at Layer3 TV

### 5G & IoT



- 30 5G cities in 2018 using a combination of 600 MHz and mmWave
- 600 MHz being deployed with 5G-ready equipment
- IoT: launched nation's first Narrowband IoT service plan
- 5G IoT to launch on 600 MHz enabling IoT devices with extended battery lives
- ~750K SyncUp devices sold to date

# SIMPLICITY & DIGITALIZATION DRIVE COST EFFICIENCIES

**EASY TO JOIN** 



- SIDE-BY-SIDE SELLING MEANS LESS TRANSACTING, MORE SERVING CUSTOMERS
- SIMPLIFYING THE SWITCHING EXPERIENCE



DRIVING SUPERIOR BILLING TRANSPARENCY, CLARITY AND CONSISTENCY

## EASY TO SERVE

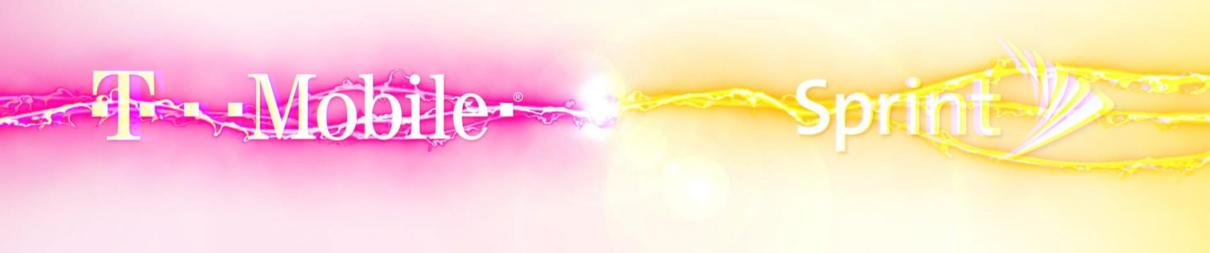


- SELF-SERVICE FUNCTIONALITY ALLOWS
  CUSTOMERS TO SOLVE ISSUES ON THEIR OWN
  TERMS
- DRIVING RECORD LOW CALLS PER ACCOUNT.

> \$1B PROJECTED GROSS COST SAVINGS OVER CURRENT RUN RATE<sup>1</sup> OVER NEXT 3 YEARS

<sup>1</sup> Run Rate defined as % of service revenue

## **SUPERCHARGING THE UN-CARRIER**



## CREATING ROBUST COMPETITION IN THE 5G ERA

## UNPRECEDENTED NATIONWIDE 5G NETWORK

- UNPRECEDENTED CAPACITY, SPEED AND LATENCY
  TO DRIVE REVOLUTIONARY CONSUMER
  EXPERIENCE UNLOCKING SIGNIFICANT ECONOMIC
  VAI UF
- ACCELERATE U.S. POSITION IN 5G AS THE ONLY COMPANY ABLE TO QUICKLY DEPLOY A BROAD AND DEEP NATIONWIDE 5G NETWORK
- USE EARLY LEADERSHIP IN 5G TO CAPTURE WAVE OF INNOVATION AND DISRUPTION, BENEFITING CUSTOMERS AND THE NATION'S ECONOMY

#### SUPERCHARGE UN-CARRIER STRATEGY AT PIVOTAL TIME

- NETWORK CAPABILITIES AND CAPACITY WILL LEAD
   TO BETTER SERVICE AND LOWER PRICES
- CONTINUATION OF PROVEN PRO-CONSUMER
   STRATEGY THAT IS FUNDAMENTALLY BUILT AROUND
   MORE VALUE AND HIGHER CONSUMER
   SATISFACTION
- PROACTIVELY CREATE NEW COMPETITION AND DISRUPTION IN ADJACENT MARKETS
- BRING REAL MOBILE BROADBAND COMPETITION TO RURAL AMERICANS FOR THE FIRST TIME AND NEW COMPETITION FOR BUSINESSES OF ALL SIZES

## JOB CREATOR FROM DAY ONE UNLOCKING ECONOMIC VALUE

- CREATING NEW JOBS DAY ONE WITH INVESTMENT TO EXPAND CUSTOMER SERVICE, RETAIL FOOTPRINT AND 5G BUILDOUT
- DRIVING RAPID INVESTMENT NATIONWIDE IN 5G, ENSURING AMERICAN LEADERSHIP IN 5G ECO-SYSTEM
- FORCING CONVERGED INDUSTRY LEADERS TO INVEST MORE AND FASTER
- ACCELERATING THE GROWTH OF MILLIONS¹ OF U.S. JOBS AND SUBSTANTIAL ECONOMIC VALUE

<sup>&</sup>lt;sup>1</sup> Based on CTIA estimates from "The Global Race to 5G" April 2018.

## **NEW T-MOBILE WILL DELIVER SIGNIFICANT SYNERGIES**

	RUN-RATE SYNERGIES (\$BN, PRE-TAX)	COST TO ACHIEVE (\$BN) <sup>1</sup>	NPV OF SYNERGIES (\$BN) (Net of Costs to Achieve)	INTEGRATION YEARS
NETWORK  SITE DECOMMISSIONING, COST TO DECOMMISSION, NETWORK INTEGRATION COSTS & CAPEX SAVINGS	~\$4+	~\$10 <sup>2</sup>	~\$26	3
SALES, SERVICE & MARKETING  STORE CONSOLIDATION, INCREASED LEASE & LABOR EXPENSE, STORE REFRESI COST, ADVERTISING, CUSTOMER CARE, EQUIPMENT REVENUE & LOGISTICS	~\$1+	~\$1	~\$11	3-4
BACK OFFICE IT & BILLING & FIXED G&A	~\$1+	~\$4	~\$6	3-4
TOTAL  Note: All numbers are approximations and reflect management estimates as of date of presentation.	~\$6+	~\$15	~\$43+	

153 **GROUP STRATEGY** GERMANY SYSTEMS SOLUTIONS **TECHNOLOGY & INNOVATION T-MOBILE US EUROPE GROUP DEVELOPMENT FINANCE** 

1 NPV of Synergies net of Costs to Achieve, calculated assuming a discount rate of 8.0% on unlevered free cash flow. Numbers may not add due to rounding. 2 Net of avoided Capital Expenditures.

## POISED FOR SIGNIFICANT MARGIN EXPANSION

	2018 PRO FORMA	2018 PRO FORMA MARGINS	3-4 YEAR TARGETS	LONGER-TERM TARGETS
TOTAL REVENUE	\$75-76B		2-4% CAGR \$81-86B	3-5% CAGR \$95-100B
WIRELESS SERVICE REVENUE	\$53-57B		2-4% CAGR \$59-61B	2-4% CAGR \$67-70B
ADJUSTED EBITDA <sup>1,2</sup>	\$22-23B	40-42%	45-47% MARGIN	54-57% MARGIN
CAPITAL EXPENDITURES <sup>3</sup>	\$10-11B	18-19%	15-20% OF SVC REV	13-15% OF SVC REV
ADJUSTED EBITDA LESS CAPITAL EXPENDITURES <sup>1,4</sup>	\$11-12B	20-21%	26-30% MARGIN	42-45% MARGIN

Note: Service Revenue and Adjusted EBITDA figures do not include the impacts of new revenue standard. All numbers are approximations and reflect management estimates of the date of presentation

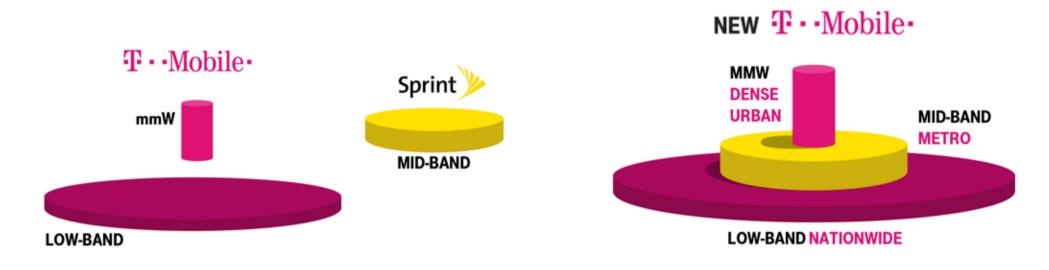
<sup>&</sup>lt;sup>1</sup>Adjusted EBITDA based on T-Mobile's as-reported definition which is unburdened for stock-based compensation.

<sup>&</sup>lt;sup>2</sup>Adjusted EBITDA margins calculated based on Service Revenue.

<sup>&</sup>lt;sup>3</sup>Capital Expenditures margins calculated based on Service Revenue.

<sup>&</sup>lt;sup>4</sup> Adjusted EBITDA less Capital Expenditures calculated based on Service Revenue.

## THE FIRST BROAD AND DEEP NATIONWIDE 5G NETWORK



NEW T-MOBILE IS THE ONLY COMPANY CAPABLE OF DELIVERING BROAD AND DEEP NATIONWIDE 5G IN CRITICAL EARLY STAGE OF INNOVATION



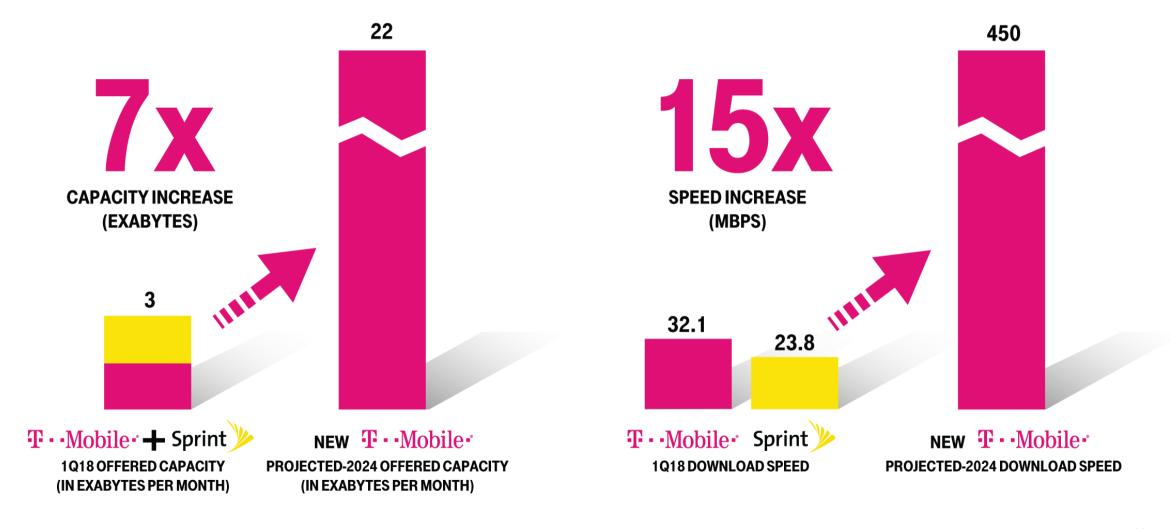
ENHANCED FINANCIAL
POSITION ABOVE WHAT
EITHER COMPANY COULD
DO ALONE TO INVEST

INTHE ROLLOUT OF 5G

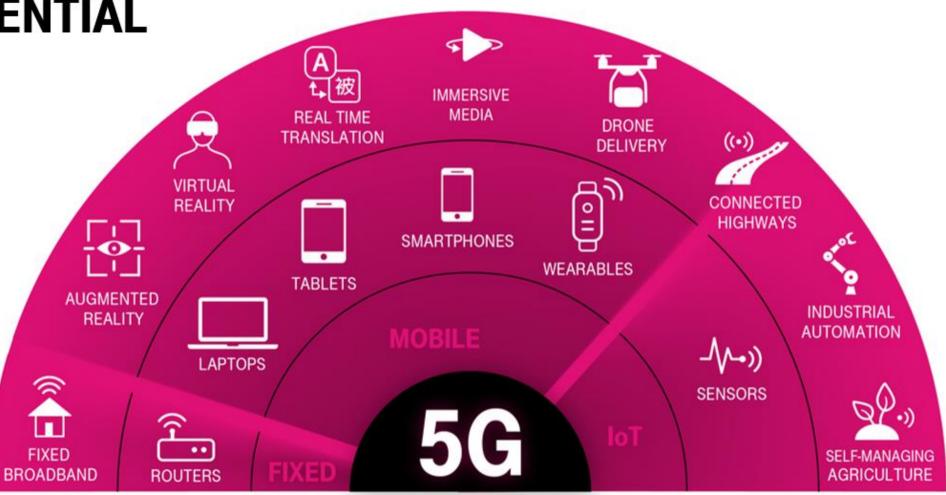


PROVEN LEADERSHIP AND PLAN TO RAPIDLY ROLLOUT ADVANCEMENTS – T-MOBILE DEPLOYED NATIONWIDE LTE TWICE AS FAST AS VERIZON AND THREE TIMES AS FAST AS AT&T

## POWERFUL COMBINATION RESULTS IN REVOLUTIONARY CAPACITY & SPEED



LIMITLESS POTENTIAL





### **ANCHOR ON T-MOBILE NETWORK**

- FAST AND LOW RISK DELIVERY OF SYNERGIES WHILE PROTECTING CUSTOMER EXPERIENCE
- USE T-MOBILE AS THE ANCHOR NETWORK AND INCREASE NETWORK DENSITY AND COVERAGE WITH SELECTED SPRINT "KEEP" SITES
- DEPLOY 2.5 GHZ SPECTRUM ON T-MOBILE SITES AND FULL T-MOBILE SPECTRUM PORTFOLIO ON SPRINT "KEEP" SITES
- NEW T-MOBILE NETWORK OF ~85K MACRO SITES AND 50K SMALL CELLS



### **MIGRATE CUSTOMERS**

- MIGRATE SPRINT CUSTOMERS TO T-MOBILE NETWORK WITHIN 3 YEARS WITHOUT DEGRADING EXPERIENCE ON SPRINT'S NETWORK
- ON DAY ONE, 20 MILLION SPRINT CUSTOMERS ALREADY HAVE COMPATIBLE HANDSETS WITH T-MOBILE'S NETWORK
- AGGRESSIVELY MIGRATE CDMA VOICE TO VOLTE
- BILLING AND BACK OFFICE SYSTEM MIGRATIONS TO OCCUR OVER TIME MINIMIZING DISRUPTION TO DISTRIBUTION, CARE, AND OPERATIONS

## NEW T-MOBILE WILL DELIVER UNPRECEDENTED NETWORK QUALITY AND CUSTOMER VALUE

- Rapid industry convergence and fast emerging 5G economy creates ideal timing for unique combination
- Creates only company with capacity to build the first broad and deep nationwide 5G network
- Competition will extend U.S. global internet leadership in the 5G era
- Supercharges pro-consumer Un-carrier strategy
- Expected to create jobs and unlock economic growth
- Compelling benefits support rationale for regulatory approval in the era of 5G

GROUP STRATEGY TECHNOLOGY LEADERSHIP GERMANY T-SYSTEMS EUROPE/NL TMUS FINANCE 159



- Exceeded or met aggressive goals set at Capital Markets Day 2012 & 2015
- Industry leading momentum set to continue with strong organic plan
- Incredible LTE Network transitioning to 5G using 600 MHz
- Sprint transaction enables unprecedented network quality & customer value
- New T-Mobile will create value for investors & consumers

GROUP STRATEGY TECHNOLOGY LEADERSHIP GERMANY T-SYSTEMS EUROPE/NL TMUS FINANCE 160

## EUROPE

**SRINIVASAN GOPALAN** 

### **KEY MESSAGES**

Majority of assets already converged, with a powerful brand across footprint & relevance in economies

BEGINNING OF TURNAROUND TO GROWTH Markets are growing again, DT EU net adds are at fair share, and EBITDA is now growing

ACCELERATE GROWTH IN CONVERGENCE Drive volume & scale up fast to reach > 50% FMC HH penetration (by 2021) with strong Magenta1 portfolio and go-to-market based on advanced HH analytics

LEAD TRANSITION TOWARDS GIGABIT SOCIETIES

Develop assets portfolio to fully converged, triple fiber rollout run-rate

STRONG ASSETS PORTFOLIO DT FU

- LEAD IN BUSINESS PRODUCTIVITY

  Leverage leading ICT position in key verticals, push Cloud & DT's Smart Cities/IoT portfolio, key partner for digitalization in VSE & SMB<sup>1</sup> seaments
- VALUE TRANSFORMATION

  Around 10% net indirect cost reduction until 2021, driven by operational efficiency measures, simplification, digitalization, and a future-proof-organization
- FINANCIAL OUTLOOK

  Clear strategic plan for sustainable growth with a revenue CAGR of > 1% and EBITDA CAGR of +1-2% (2017-2021)

until 2021

DEST CUSTOMER EXPERIENCE
Strong & convincing brand promise, digital customer interaction, automated technical service, and a customer centric culture

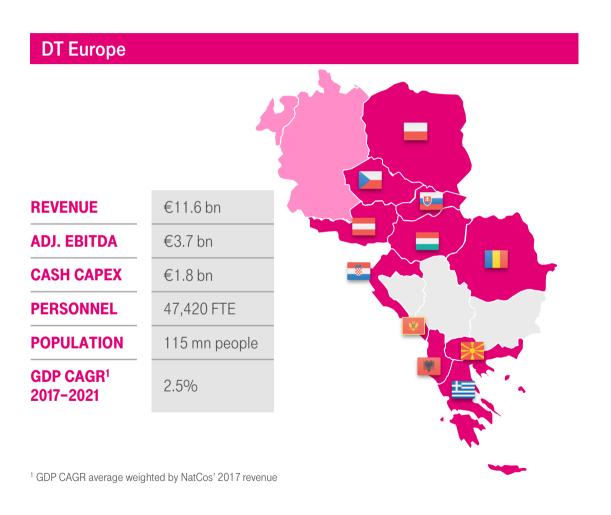
<sup>&</sup>lt;sup>1</sup> VSE = very small enterprises, SMB = small and medium size businesses

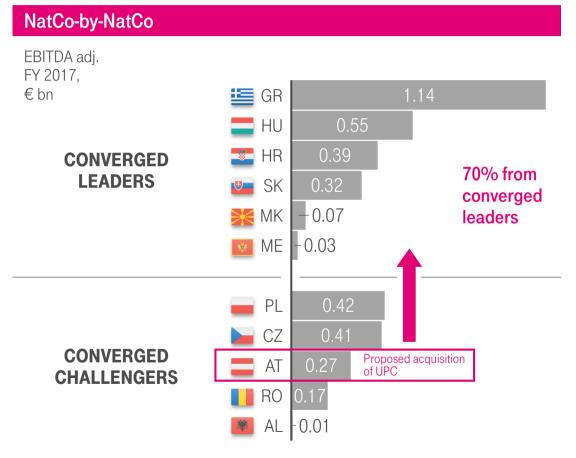
## **REVIEW 2014 - 2018**

## **REVIEW**

	Ambition level 2018	Achievements 2017	Delivered/on track
TECHNOLOGY	<ul> <li>All-IP transformation: All integrated NatCos 100% IP-based in 2018</li> </ul>	■ Ca. 70% in 2017	0
LEADERSHIP	<ul> <li>Next generation accesses: 75–95% LTE pop coverage in 2018</li> </ul>	• 94% in 2017	
	<ul> <li>FTTx for ≈ 50% of households (in integrated footprint) with at least 100 Mbit/s in 2018</li> </ul>	■ 32% in 2017	
BEST CUSTOMER	<ul> <li>Realization of customer experience initiative "eTransformation": between 30% and 99% eService share in our NatCos in 2018</li> </ul>	■ 31%-95% in 2017	•
EXPERIENCE	<ul> <li>Implementation of innovative FMC &amp; TV experiences in 2018</li> </ul>	<ul> <li>Hybrid Proposition, new TV user interface rollout</li> </ul>	
	■ €0.6 bn pay-TV revenues in 2018	■ €0.48 bn in 2017	
	<ul> <li>Continuation of revenue transformation: 38% of revenues with pockets of growth in 2018</li> <li>[Pro Forma: 36% of revenues with pockets of growth]</li> </ul>	■ 33% in 2017	
SUPERIOR CASH	■ Stable Adj. Cash Contribution ≈ +0.5% CAGR 2014–2018	• CAGR 2014–2017 -6.7%	
PERFORMANCE	<ul> <li>Reduction of indirect cost by €0.4 bn 2018 vs. 2014</li> </ul>	■ €0.24 bn 2017 vs. 2014	
	<ul> <li>Op. ROCE improvement by around +2%-pts 2018 vs. 2014</li> </ul>	-2%-pts 2017 vs. 2014	

### DT EUROPE IS A STRUCTURALLY ATTRACTIVE CONVERGED ASSET

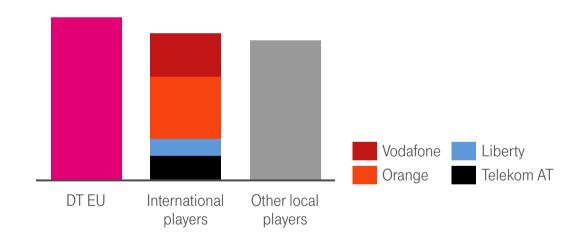




## DT IS THE LARGEST INTERNATIONAL PLAYER IN OUR FOOTPRINT WITH SIGNIFICANT GDP IMPACT

#### We have scale in our markets...

Integrated revenues DT EU footprint<sup>1</sup>

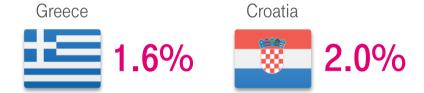


### Enormous power of our brand across footprint

#### <sup>1</sup> Based on 2017 revenues

### ... and we have economic impact

DT local revenues, as share of GDP



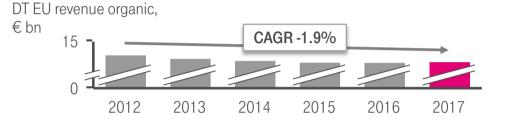
#### DT's position in ICT

revenues with ICT, focused on digitalizing governments, societies & enterprises

≈€1 bn

### WE HAVE BEEN POORLY VALUED BECAUSE OF PAST PERFORMANCE



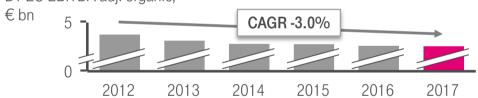


...DT Europe has been valued poorly

**EBITDA** multiple DT Europe

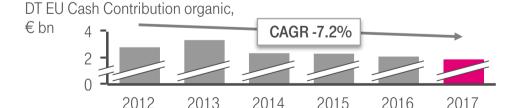
 $\approx 4.9 x^1$ 

DT EU EBITDA adj. organic,



**EBITDA** multiple western European incumbents

6.3x



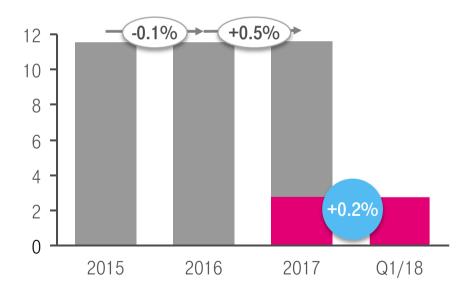
Note: Organic development adjusted for regulation and currency effects, Cash Contribution in 2012 & 2013 only adjusted for T-Mobile Netherlands and Globul (Bulgaria). 1 As of May 18th, 2018 based on a basket

CAGR 2012-2017

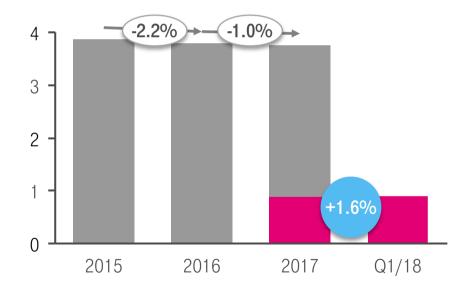
## 2017 HAS SEEN THE BEGINNING OF THE TURNAROUND

### Back to growth again

Revenue growth, organic, €. bn



EBITDA turnaround visible, adj. organic, € bn

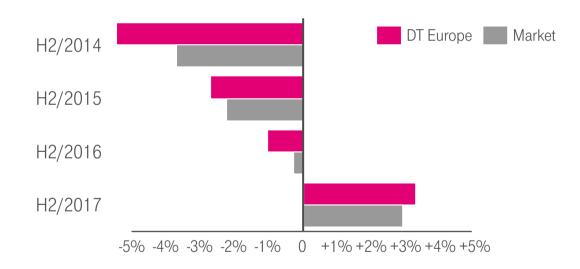


Note: Organic development adjusted for regulation and currency effects.

## MOBILE MARKETS BACK TO GROWTH, DT BACK TO FAIR SHARE

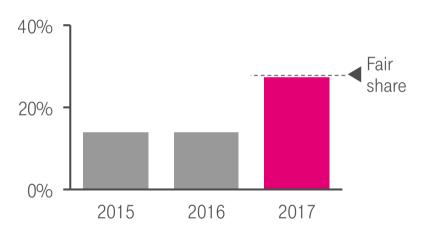
### Improving market environment leads to growth...

Mobile service revenue development<sup>1</sup>, year-over-year, per half year



### ...while DT has begun to leverage its quality leadership

Mobile contract net adds back on fair share level, Mob. contract net adds market share





8 countries "best in P3 test" (GR, HU, HR, SK, CZ, PL, MK, ME)

<sup>&</sup>lt;sup>1</sup> Source: DT analysis

### SUBSTANTIAL PROGRESS ON CONVERGENCE AND TROUBLED ASSETS

### Commercial strength in FMC

Growth in B2C, 2017 vs. 2016

FMC HH +420 k +43% FMC REVENUE +€300 mn +81%

Growth in B2B, 2017 vs. 2016

**FMCC ACCOUNTS** 

+60 k

+38%

**FMCC REVENUE** 

+€60 mn

+20%

Churn reduction, 2017 vs. 2016

**MOBILE SUBS. CHURN** 

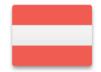
-1,850 k

-13%

### **Assets strengthened**

#### T-Mobile Austria developed towards convergence

Proposed acquisition of UPC





#### Turnaround in critical NatCos

- T-Mobile Poland partnering deal with Orange, FMS¹ launched, and port-in leadership
- Telekom Romania's brand re-positioning



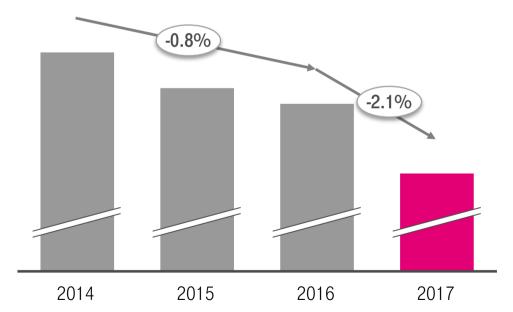


<sup>&</sup>lt;sup>1</sup> Fixed-mobile-substitution

## REACCELERATED COST SAVINGS AND MAJOR ORGANIZATIONAL CHANGES IN 2017

#### **Reduction in indirect costs**

Indirect cost, organic



Note: Organic development adjusted for regulation and currency effects. 

<sup>1</sup> Board of management

### People & structural issues improved

C-levels<sup>1</sup> reviewed in NatCos

Changes in last 12 months

≈50%

#### EU HQ made leaner & more agile

Smaller organization

-30%

### International experts brought into HQ

New executive position holders

37%

## STRATEGY 2018 - 2021

# EUROPE IS POSITIONED TO CREATE VALUE BY LEADING IN CONVERGENCE, TECHNOLOGY, DIGITALIZATION, AND B2B

### **Our strategy GROW** LEAD IN CUSTOMER I FAD IN LEAD IN BUSINESS **EXPERIENCE TECHNOLOGY PRODUCTIVITY** ONE CONNECTIVITY **INTEGRATED** SECURE ICT SOLUTIONS & PERFECT SERVICE GIGABIT NETWORKS & BIG IOT **SAVE FOR GROWTH INVESTMENTS** SIMPLIFY, DIGITALIZE, ACCELERATE

### **Ambition Europe**

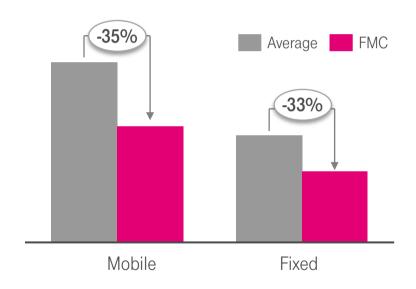


- 1 LEAD IN CUSTOMER EXPERIENCE/LEAD IN TECHNOLOGY
  - Magenta1: <u>Drive convergence</u> to enable value creating market structure
  - Broadband/TV: Own the gigabit position through smartly funded fiber investments
  - Mobile: Maintain <u>best network</u> and commercial momentum to exploit market growth
  - **Leading service:** Differentiate with <u>digital and seamless</u> connectivity, enabled by <u>agile & simplified IT</u>
- 2 LEAD IN BUSINESS PRODUCTIVITY
  Leverage our <u>unique B2B position</u> to drive growth in cloud, IoT, and Smart Cities
- 3 VALUE TRANSFORMATION
  Efficiency improvement through leveraging digital opportunities and our unique scale

### **III** CONVERGENCE: COMMERCIAL KPIs EVIDENCE BENEFITS

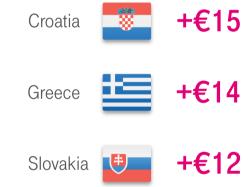
#### FMC reduces churn

Example Greece, Q4/17



### FMC increases incremental ARPHH1

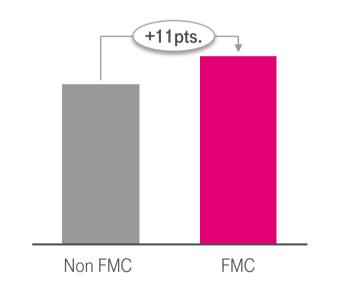
December 2017



Hungary

### **FMC** improves TRI\*M

Greece, Croatia, Hungary, Slovakia, Q4/17



GROUP STRATEGY GERMANY SYSTEMS SOLUTIONS TECHNOLOGY & INNOVATION T-MOBILE US EUROPE GROUP DEVELOPMENT FINANCE 174

+€9

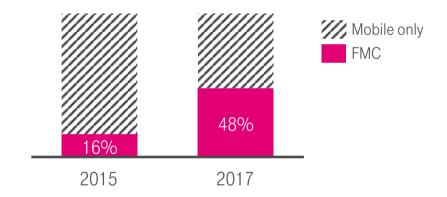
<sup>&</sup>lt;sup>1</sup> Delta revenue per HH created after migration to FMC

### **II** CONVERGENCE: REDUCES EXPOSURE TO MARKET VOLATILITY

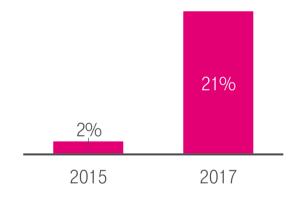
### Focus on commercial execution in FMC: Drive volume and scale up fast - example Slovakia



FMC gross add share, % of total mobile B2C contract sales FMC mobile contract share,
% of total mobile B2C contract base

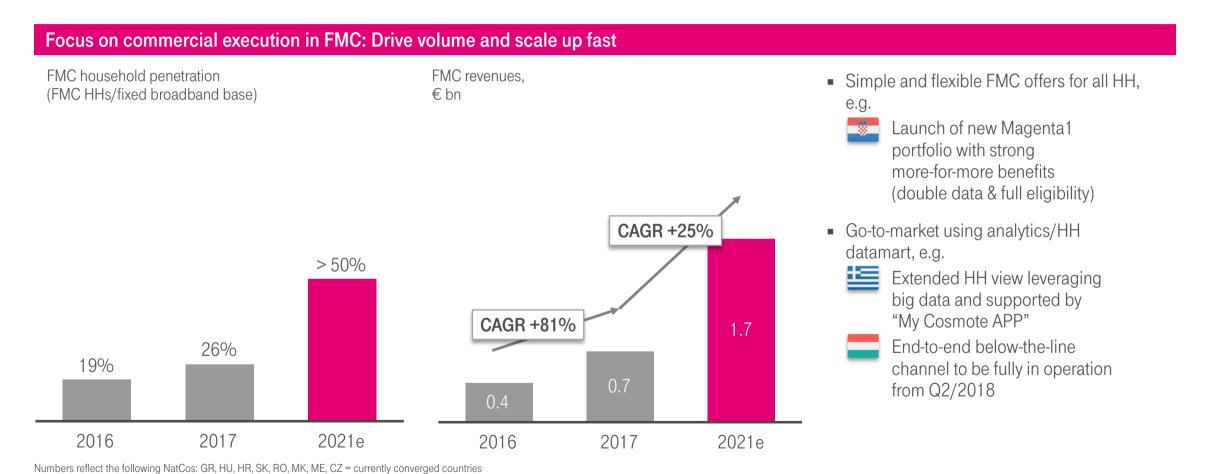


Less exposure to market volatility as we leverage Europe's largest fixed base



Build a more resilient portfolio with time

### **II** CONVERGENCE: TARGETING > 50% HOUSEHOLD PENETRATION

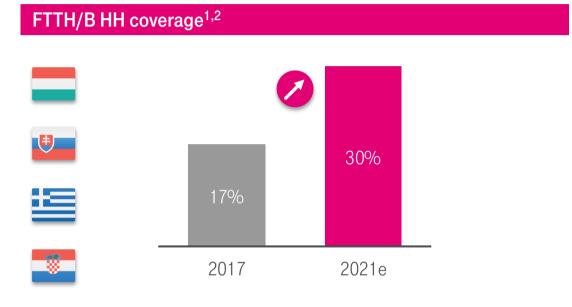


## II NETWORKS: "CONVERGED LEADER" MARKETS WILL LEAD TRANSITION TOWARDS GIGABIT SOCIETIES

1 Compelling economics & track record

2 Societal benefits

3 Unique leverage



Reinforce leading fixed broadband position and/or address strong competition

<sup>&</sup>lt;sup>1</sup> Including cable ED3 coverage <sup>2</sup> Numbers include the following countries: GR/HU/SK/HR = Converged leaders

## II NETWORKS: COMPELLING FIBER ECONOMICS IN FOOTPRINT, WITH TRACK RECORD TO MONETIZE

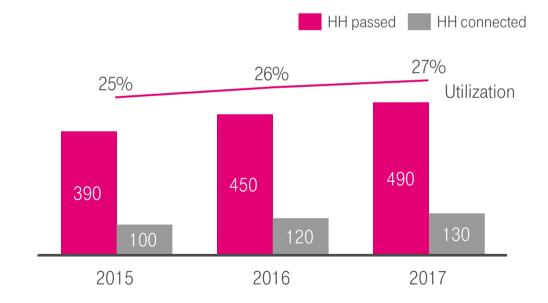
### 1 Compelling economics and track record

#### DT EU fiber economics

- <€300 per home passed for 25–50% of footprint</li>
- FTTH ARPU ranges from €20 to €25¹
- 7–12 years payback even in case of copper overbuild

Fiber utilization on profitable level and improving, example Slovakia, k





<sup>&</sup>lt;sup>1</sup> Based on analysis from Croatia, Hungary, Slovakia

### **II** NETWORKS: PARTNERING WITH LOCAL GOVERNMENTS

### 2 Societal benefits

#### **CONNECTING EUROPE BROADBAND FUND**

EU has invested €2.5 bn for broadband rollout and connectivity through structural funds from 2007–2013, [...] and in 2014–2020 member states have approved €6 bn.

(Jan Dröge, The European Broadband Competence Offices)

#### SUPER FAST INTERNET PROGRAM

...worth HUF60-70 bn, e.g., to provide BB Internet access to all educational institutions ( $\approx$  HUF13 bn), funded with domestic budget and by EU.

(Tamas Deutsch, Digital Commissioner)

#### DT'S FIBER ROLLOUT COMMITMENT

This investment is a vote of confidence in the Greek economy and at the same time an important step for its digital transformation. (Alexis Tsipras, Prime Minister)

### 3 Unique leverage

#### Strong synergies with mobile

- Improved economics with FMC: +€9–15 ARPHH increase until 2017
- Synergies in fiber backhaul

#### **Experienced in fiber rollout & monetization**

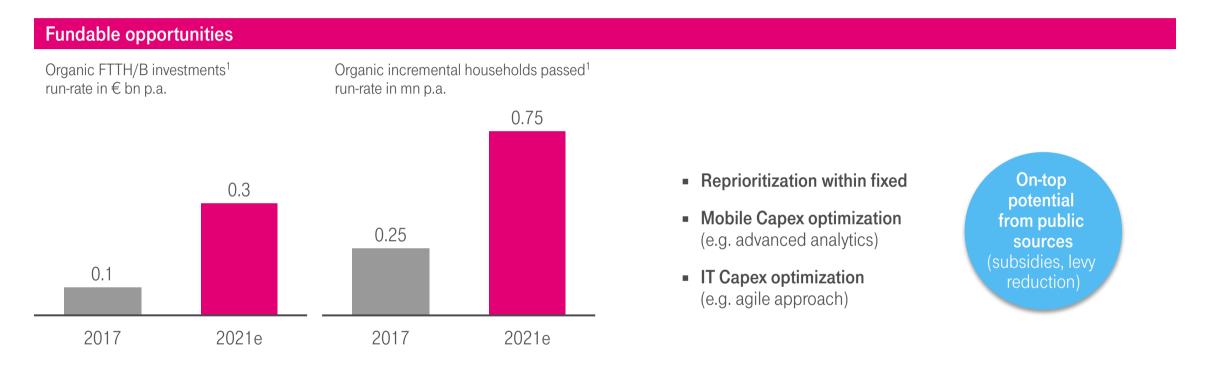
- 1.5 mn HHs passed with fiber in 2016 & 2017, and 0.33 mn HHs connected
- 0.42 mn fixed broadband net adds 2016 & 2017

## II NETWORKS: TAILORED STRATEGIES FOR OUR "CONVERGED CHALLENGER" MARKETS

Strategies for converged challengers				
	AUSTRIA	CZECH	POLAND	
M&A	Proposed UPC deal	opportunistic	opportunistic	
WHOLEBUY	<b>✓</b>	Cetin	Orange letter of intent	
OWN BUILD	8		×	
FWA/FMS¹ (FIXED)		<b>⊘</b>		

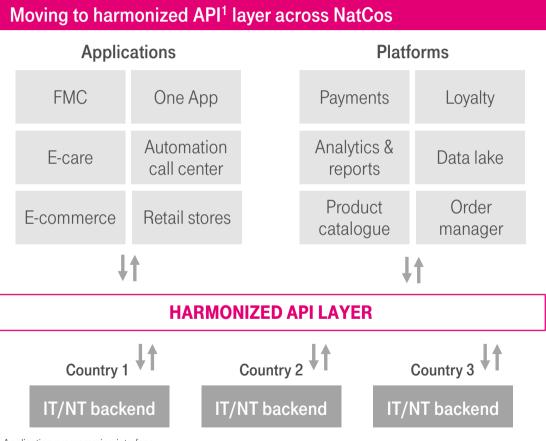
<sup>&</sup>lt;sup>1</sup> Fixed wireless access/fixed mobile substitution

## II NETWORKS: SMART FUNDING TO TRIPLE FIBER RUN-RATE WITHIN STABLE CAPEX ENVELOPE



<sup>&</sup>lt;sup>1</sup> FTTH/B and Cable ED3, organic build out in our currently converged countries, excluding Romania (GR, HU, HR, SK, MK, ME, CZ),

### **III** SERVICE: REINVENTING OPERATIONS WITH SIMPLIFIED & AGILE IT



### New way of working

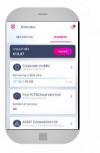
- Growing off-shore development capability
- Agile, simplified, open source development reutilizing the harmonized API layer
- Scalable cloud based infrastructure
- Enabler for big data analytics to drive, e.g. customer led fiber rollout

<sup>1</sup> Application programming interface

### **III** SERVICE: CONVERGENCE THROUGH SEAMLESS CONNECTIVITY

### Digital at the center

App as focal point for customer interaction

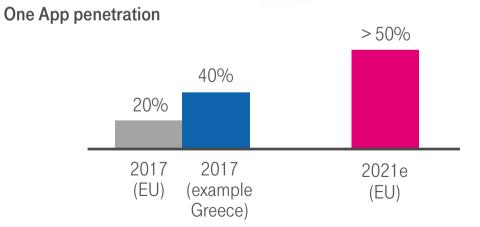


### Connected everywhere



Easy to use services, in lean & fast production

- Seamless connectivity app:> 20% of FMC customer base by 2021
- New homegateway with better Wifi and SmartHome support:
   60-80% of HHs swapped by 2021





**European Aviation Network completed!** 

 World's first integrated satellite and air-to-ground connectivity network

# SERVICE: TARGETING NUMBER 1 OR 2 IN TRI\*M IN ALL OUR MARKETS – GREECE IS LEADING THE WAY

#### Cosmote Greece succeeds in stable #1 position in customer satisfaction TRI\*M index



Key customer satisfaction drivers being addressed

#### **Strong BRAND**

• "One world better for all" new brand promise

# Innovative **CUSTOMER CARE**

 UFixit app: innovative digital care based on devices as interactive service tools with video communication

#### **Digital CHANNELS**

App penetration already at 40%

# Excellent TECHNICAL SERVICE

■ Technical service transformation: > 60% of outages automatically detected & dispatched in 2018

# Customer centric CULTURE

■ Customer experience training: > 1,000 managers participating in "one day at first line"; 280 Customer Experience Ambassadors

COSMOTE is an active part of Greek society and takes on a bigger role towards the country and the Greeks, by connecting our products and services with a bigger goal.









# **2** B2B: CONVERGENCE AND CLOUD DRIVE GROWTH

#### B2B: Growth via push of cloud and aggressive increase of 2 & 3 leg penetration

#### Sales push in VSE and SMB

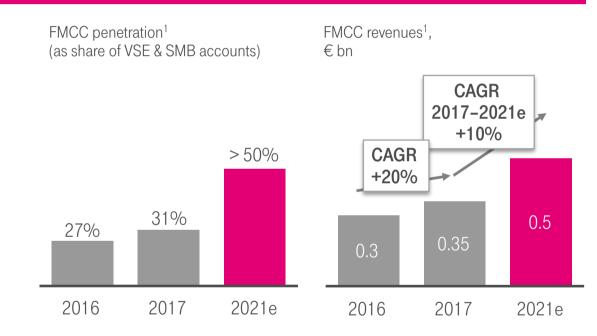
- Leverage cloud business
- Big Data campaigning & horizontal bundling to drive FMCC
- New go-to-market approach for SMBs



SMB vertical clusters specific bundling, e.g. for retail, hotels, ferries, food service (hotel/restaurant/coffee shop)



Radically simplified standard portfolio for VSE/SMB, e.g. 3 "un-carrier" rate plans each in mobile & fixed



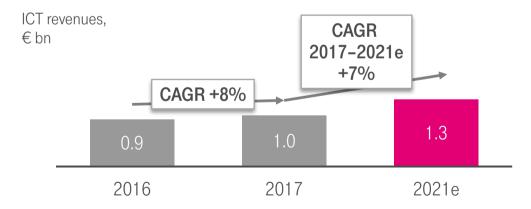
Note: VSE = very small enterprises, SMB = small and medium size businesses. 

<sup>1</sup> FMCC: Fixed Mobile Cloud Convergence (B2B Convergence Product)

### **B2B: LEVERAGING ICT STRENGTH FOR SMART CITY / IOT**

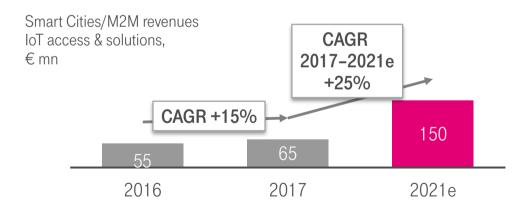
#### Leverage position in ICT & further grow cloud

- **Hybrid cloud:** Expansion of "IT as a Service" with Azure services
- Win with strategic partners across DT-EU footprint, e.g. Cisco ROSE, SAP, Microsoft (O365)
- Focus on Verticals
  - Country digitalization in CZ, HR, MK, ME
  - Finance & Insurance in HU, PL, GR



#### Push of Smart Cities/IoT portfolio

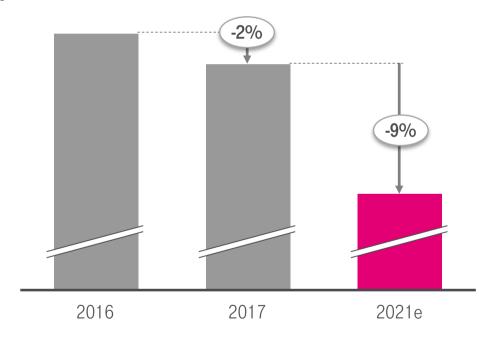
- Focus on key city verticals such as Smart Lighting, Smart Parking, Wifi for public services, Smart Waste Management, electronic vehicles chargers, e.g.:
  - World's 1<sup>st</sup> NBIoT connected street lights in Patras, GR
  - 1st Smart Street in Dubrovnik, HR



# **B** VALUE TRANSFORMATION: €0.4 BN LOWER INDIRECT COSTS 2021

#### Short-term value transformation mainly from efficiency in current operating model, digitalization impact in 2019+

Indirect cost, organic



Operational efficiency, e.g.

Consolidation and retirement NT & IT

≈ €120 mn

Back-office elimination

A Simplified operations

Simplified products

Simplified IT

Simplified processes

≈ €50 mn

B Digital customer interaction

One App, centrally developed

Radical shift to online sales

Serving SMBs via FMCC portal

≈ €90 mn

C Future-proof organization

Leaner structure

Culture, experts, skills

≈ €100 mn

Note: Organic development adjusted for regulation and currency effects.

# A RADICAL SIMPLIFICATION IS A KEY ENABLER

#### **Commercial propositions**

- Address tariffs, security vulnerability assessment and business rules
- Delineate segment overlaps

today

 Remove high customer impact rules (eg. closed-user-groups)

#### **Processes**

- Digital first
- Unify delivery model across channels and segments
- Review risk management

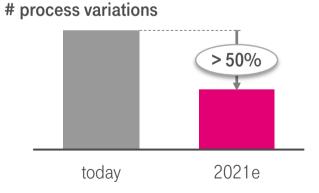
#### IT/platforms

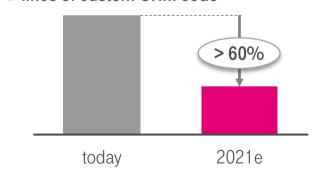
- De-customize applications
- Simplify user interface
- Simplify architecture
- Decommission applications

# lines of custom CRM code

# # tariffs

2021e





# **B** SCALING UP CUSTOMER FACING DIGITAL TOUCHPOINTS

#### **B2C:** Digital customer self-service

#### Digitalization of customer interface

- Smartphone service app as direct link to customers
- Centrally developed, with standardized API

#### **Upscaling of E-Commerce**

- Customer contact digital end-to-end with zero-touch self-service
- Intuitive self-administration

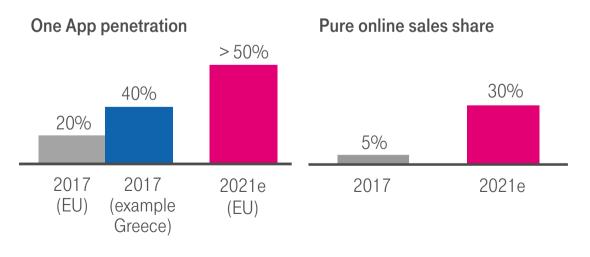
#### B2B: Digitalization partner for SMBs

#### One digital cockpit "FMCC\* Portal"

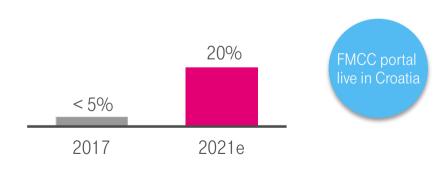
Easy-to-use customer touchpoint for all Telco and ICT services

#### Upscaling of cloud services

Sales initiatives pushing XaaS, e.g. Office 365



#### FMCC portal share @ SMBs



# **©** OPPORTUNITY FOR CROSS BORDER SYNERGIES

#### Establish an organization with the right structure, people & skills

**Future-proof organization** 

Target operating model and organization

Structure, people & skills

Right-sizing and cost position

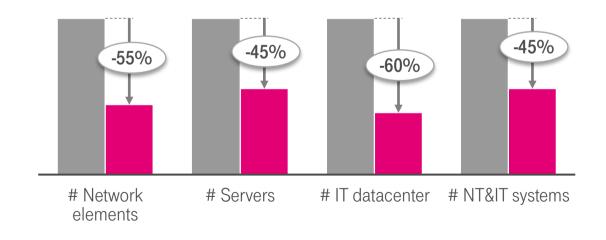
Fit for the future capabilities

#### Learn from CZ and SK merger



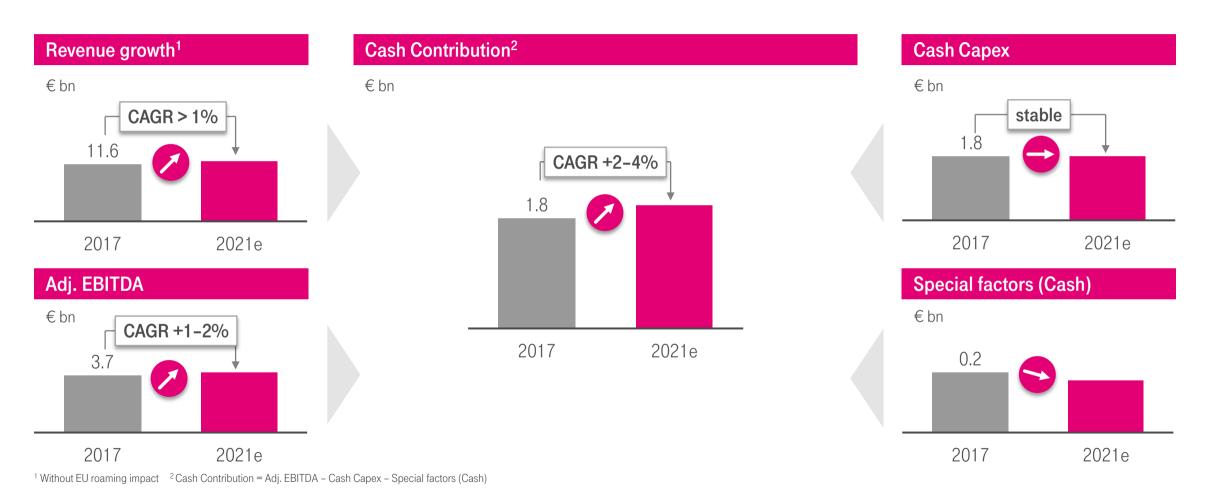
Ind. cost savings 2021 vs. 2017 ≈ €50 mn

Technology transformation element is €30–35 mn



# FINANCIAL OUTLOOK

# **FINANCIAL OUTLOOK**



# MID TERM AMBITION LEVEL

# **MID TERM AMBITION LEVEL**

	Mid term ambition level	Year
B2C GROWTH DRIVERS	• +25% CAGR FMC revenue (€1.7 bn 2021)	2017-2021e
	<ul> <li>&gt; 50% One-App-penetration, 30% pure online sales share</li> </ul>	2021e
	■ Lead in TRI*M: #1/#2 in all markets	2021e
B2B GROWTH DRIVERS	<ul> <li>+10% CAGR FMCC revenue (€0.5 bn 2021)</li> </ul>	2017-2021e
	<ul> <li>20% FMCC portal share</li> </ul>	2021e
	• +7% CAGR B2B/ICT revenue (€1.3 bn 2021)	2017-2021e
PROFITABLE MID-TERM GROWTH	<ul><li>Revenue growth &gt; 1% CAGR</li></ul>	2017-2021e
	■ EBITDA growth +1–2% CAGR	2017-2021e
	<ul> <li>Indirect cost reduction by €0.4 bn</li> </ul>	2017-2021e
	■ Cash Contribution <sup>1</sup> +2–4% CAGR	2017-2021e

<sup>&</sup>lt;sup>1</sup> Cash Contribution = Adj. EBITDA - Cash Capex - Special factors (Cash)

# **GROUP DEVELOPMENT**

**THORSTEN LANGHEIM** 

# **KEY MESSAGES**

**OVERVIEW** 

GD actively manages the DT asset portfolio. This includes Group M&A, portfolio management, investment controlling BT/TMUS and active management of selected assets, as well as our successful venture & special situation capital arm

OPTIMIZING PORTFOLIO AND CAPITAL ALLOCATION

We have increased the value of the portfolio in recent years, realizing latent value from non-core activities, while systematically strengthening our in-footprint assets, on both sides of the Atlantic

12 HUGE VALUE CREATION IN THE US

TMUS is a great example of active portfolio management through combining organic investments and M&A moves ...and we were right in waiting to agree the deal with Sprint

SUCCESSFUL TMNL TURNAROUND

We have stabilized TMNL and established it as challenger in a highly converged market. Our proposed Tele2 transaction will supercharge our competitive challenge

05 CREATING VALUE FROM TOWERS

Across Europe DT owns > 53 thousand towers. We have begun to carve out, professionalize and improve our German tower operations. These will see substantial asset and EBITDA growth going forward, as we prepare for 5G

06 UNIQUE APPROACH TO INNOVATION INVESTING

DT Capital Partners has > \$1 bn under management and established a successful track record

**17** FINANCIAL OUTLOOK

We expect our operating assets to deliver +3–4% annual growth in EBITDA and +3% in adjusted underlying<sup>1</sup> Cash Contribution, from 2017–2021e. Above all, we strive to increase the value of our assets

<sup>&</sup>lt;sup>1</sup> Excl. DFMG roll-out Cash Contribution impact (Capex and EBITDA)

# **REVIEW AND STRATEGY**

# **OUR MISSION: PROTECT AND GROW DT SHAREHOLDER VALUE**

#### **Investment management**

Investment controlling of our **public** investments...

T··Mobile·US



...Active management of dedicated DT assets



#### M&A + Portfolio management

- Overarching capital allocation strategy
- Group-wide M&A strategy
- Portfolio reviews and optimization



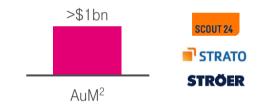
T - - / TELE2





#### **DT Capital partners**

- Venture Capital, Growth Equity and Special Situations investments
- Generate value and give DT access to innovation
- Unique governance & incentive schemes as a harbour for selected assets



GD KEY FINANCIALS¹, € BN

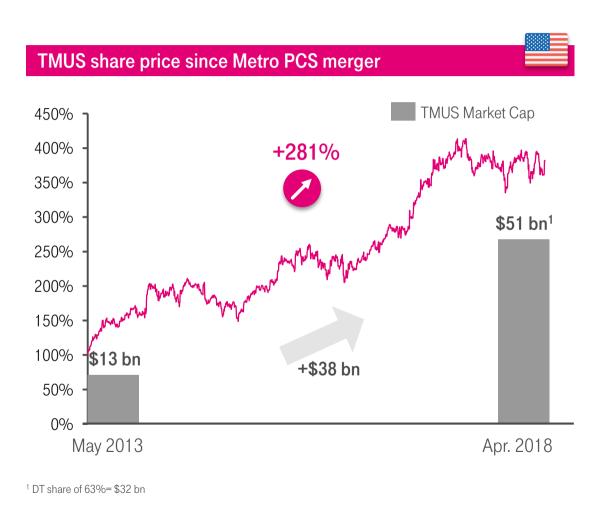


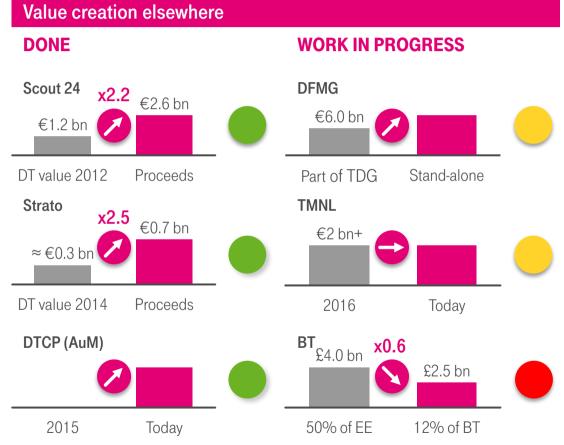


Note: all figures refer to 2017 Actual

<sup>&</sup>lt;sup>1</sup> TMUS Financials not reported under Group Development <sup>2</sup> Assets under Management incl. Advisory <sup>3</sup> EBITDA Adj – SF cash – Cash Capex <sup>4</sup> SOTP based on broker consensus (Q4/17); BT market cap as of May, 15<sup>th</sup>

# STRONG TRACK RECORD IN PORTFOLIO MANAGEMENT





### TMUS: A STORY OF SIGNIFICANT VALUE CREATION

**TODAY** 

#### **PLAN A: SPRINT ACQUISITION**

Plan B: Attractive capital allocation policy: \$9 bn SBB approved

2013-2017

#### SIGNIFICANT INVESTMENT PROGRAM

- Uncarrier strategy
- \$15 bn Spectrum acquisitions
- Network investments

2011-2013

#### **SELF-SUPPORTED SCALE**

- Break Fee (\$3 bn cash; Spectrum)
- Tower Sale \$2.5 bn
- MetroPCS reverse merger

2009-2010

#### **SHRINKING BUSINESS**

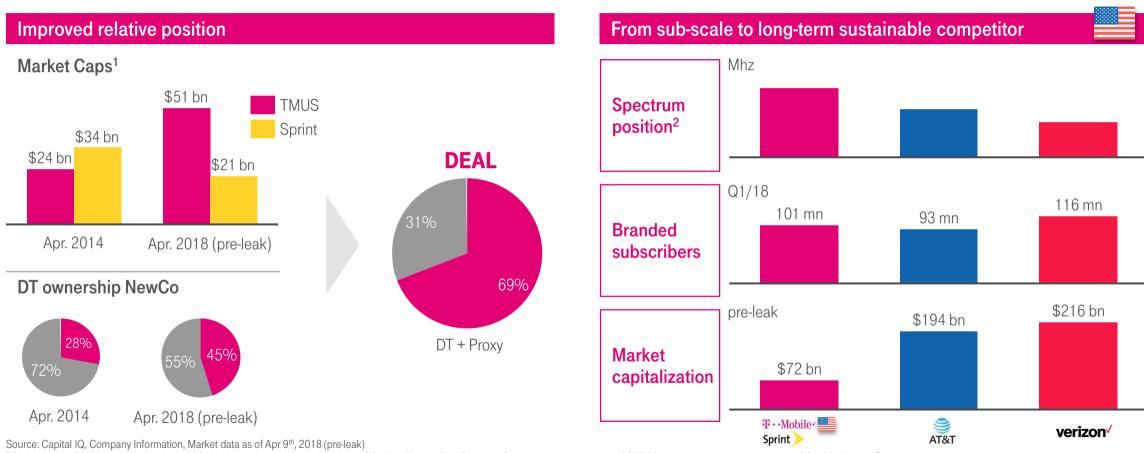
- Worst mobile network in US/loosing customers
- TMUS as biggest overhang on DT stock

#### Sprint transaction meets our key objectives



- Supercharge the Uncarrier & transform TMUS to a 5G leader
- Retain significant exposure to attractive US market
- Create value via tremendous synergy potential
- Effective governance
- "No cash leaving the system"
- Compelling capital allocation policy in place as Plan B
- Improved strategic position for future M&A (buyer or seller)

### TMUS: SUPERCHARGING THE UNCARRIER



<sup>1</sup> Sprint Market Cap based on share price of \$5.14 and basic shares outstanding (BSO) of 4,004 mn; TMUS Market Cap based on share price of \$63.09 and basic shares outstanding (BSO) of 849 mn <sup>2</sup> Microwave spectrum not included

# TMNL: TURNAROUND IN MOTION BUT STILL LONG WAY TO GO

#### Key measures and initial results



New management team, steering model and unique incentive scheme



New market approach/"Unlimited"



Aggressive cost cutting: -30% overhead FTE<sup>1</sup>



De-risked "Unlimited" via network capacity expansion



Acquired **fixed capabilities** and initiated **Towers carve-out** 



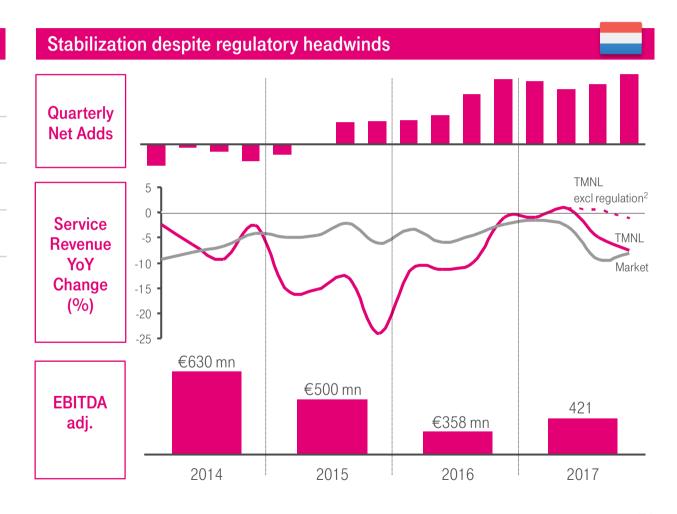
Won "Best Network" 2017 & 2018



Net Adds/Revenue improving/won last 6 quarters



Attacking the Duopoly with Unlimited/Family plan



<sup>&</sup>lt;sup>1</sup> Non-customer-facing staff <sup>2</sup> Adjusted for MTR (Mobile Termination Rate) and roam-like-home impact

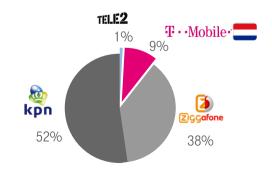
# TMNL: DUTCH MARKET NEEDS LONG-TERM VIABLE MAVERICK

#### Unique characteristics of Dutch telco market

- Two players with >90% fixed BB coverage
- Low mobile-data consumption
- Toughest net neutrality rules in Europe
- High fixed wholesale-access pricing

#### Fixed + mobile EBITDA market shares<sup>1</sup>

**GERMANY** 



1 2017 Actual

**GROUP STRATEGY** 

TMNL value creation plan Continue turnaround execution "Unlimited" customer champion Mobile network leader Lowest structural cost in the market Tele2 acquisition 2-to-3 FMC merger ■ €1 bn synergies Cash "stays in the system" Towers stay with DT Long-term sustainable "unlimited maverick"

SYSTEMS SOLUTIONS TECHNOLOGY & INNOVATION T-MOBILE US EUROPE GROUP DEVELOPMENT FINANCE 203

### **DFMG: GREAT ASSET BASE TO START FROM**



### Key strengths of DMFG



#1 German tower operator



Structural growth opportunity in Germany



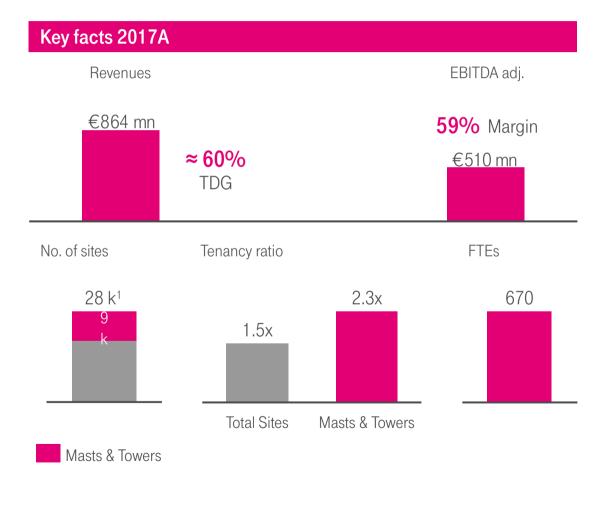
Best-in-class sites portfolio



Comprehensive & state-of-the-art IT



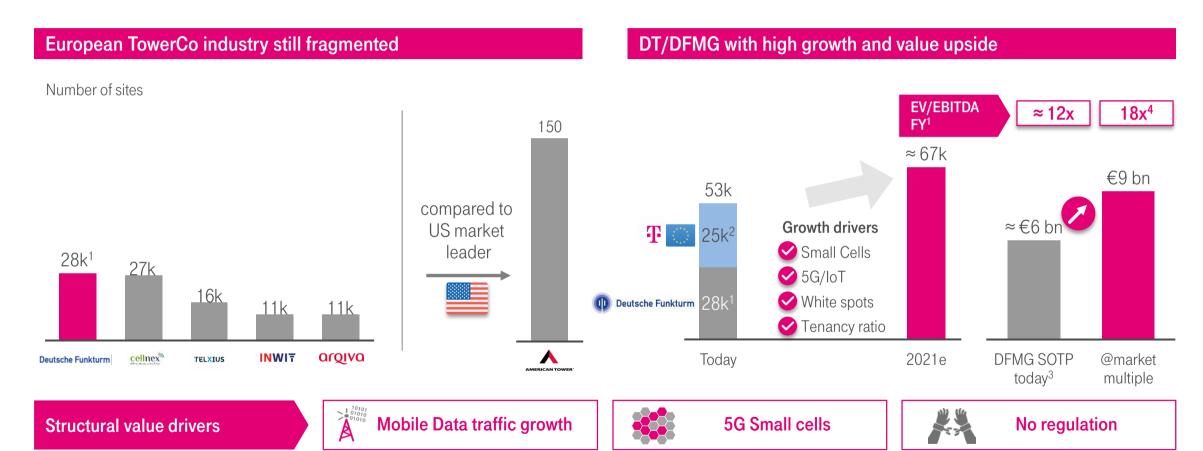
Significant optimization potential and growth upside



<sup>&</sup>lt;sup>1</sup> Including c. 3k resell sites; partially (but not solely) rented by TDG

# **DFMG: OPERATES IN A VERY ATTRACTIVE MARKET**





Source: Company reports, CapitallQ; 1 Including c. 3k resell sites; partially (but not solely) rented by TDG 2 2017 Actuals owned sites only 3 Implied based on broker SOTP average 4 Based on average Cellnex + INWIT multiples

# DFMG: EVOLUTION TOWARDS FULL-SERVICE TOWER CO



**DFMG** 1.0

- Workbench for TDG
- Cost center governance and culture

#### **DFMG 2.0**

- New management and organizational structure
- Arm's-length MLA<sup>1</sup> with TDG Capex becomes Opex
- Independent mandate and mindset
- Focus on asset utilization new MLA with VOD, TEF under negotiation
- DTCP Sunrise tower co-invest with Cellnex

#### **FULL-SERVICE TOWERCO**

- Expand product and service portfolio:
  - Macro cells (+9k)
  - Small cells
  - 5G/IoT
- e-mobility infrastructure
- Lean, highly digitized operating model
- Creating a European TowerCo by insourcing tower assets NL, AT, ...

**Until 2016** 

2017-2018e

2021e

<sup>&</sup>lt;sup>1</sup> Master Lease Agreement

### **DTCP: MORE THAN DT'S VENTURE CAPITAL ARM**



# ESTABLISHED SUCCESSFUL TRACK RECORD TO ATTRACT EXTERNAL CAPITAL

 Set up of new fund platform open for external investors to build scale

# STRONG COLLABORATION WITH DT TO COMBINE BEST OF BOTH WORLDS

- Investment focus in areas that are or might become relevant for DTAG
- Investments can benefit from strong access to DTAG either as a customer or as a channel partner to generate synergy

# AUTONOMOUS GROUP WITH MARKET STANDARD VC/PE INCENTIVE SCHEME

"Share the gain/share the pain"

#### INVESTMENT MANAGEMENT GROUP OF DEUTSCHE TELEKOM

- €250 mn Venture Capital
- €200 mn Special Situations
- Active asset management & Advisory

- 35 Deals/5 exits @ 2.4 times money
- Cellnex co-invest into Sunrise towers



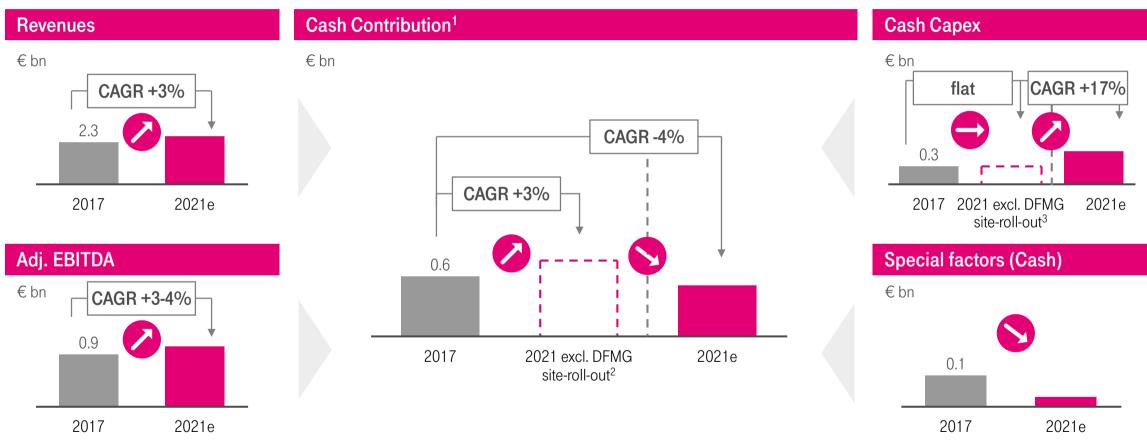




TIP

# FINANCIAL OUTLOOK

# FINANCIAL OUTLOOK GROUP DEVELOPMENT



<sup>1</sup>Cash Contribution = Adi, EBITDA - Cash Capex - Special factors (Cash) <sup>2</sup>Excl. Cash Contribution impact of DFMG roll-out plan <sup>3</sup>Excl. ≈ €0.5-0.6 bn cumulative roll-out Capex 2018-2021e

# MIDTERM AMBITION LEVEL

# **WE DRIVE ASSET VALUES**



- Secure deal approval to tap US\$43+ bn synergy upside
- Attractive stand-alone prospects and capital allocation policy as plan B



- FMC market leader in second largest EU economy
- Trades at significant discount to market



- Continued turnaround & transformation to lowest structural costs
- Secure T2 deal approval to establish long term viable mayerick

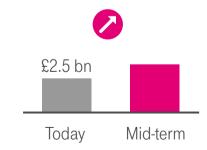


- Crystallize intrinsic value
- Capture secular growth opportunity
- Build leading EU TowerCo

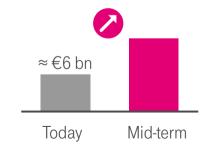


- Grow assets under management
- Raise external capital to build scale











<sup>&</sup>lt;sup>1</sup> DT share in TMUS market cap (May, 15<sup>th</sup>)

# FINANCE

**THOMAS DANNENFELDT, CFO** 

# **KEY MESSAGES**

LEADING GROWTH IN KEY FINANCIAL METRICS
 We expect growth for all our businesses driven by both better revenue momentum, and increased cost reductions. Ex US EBITDA growth to average 2-3% through 2021
 DELIVER COST TARGETS
 Our cost targets are based on All-IP, automation, and greater agility.
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 Our cost targets are based on All-IP, automation, and greater agility.

STABLE HIGH EX US INVEST

We invest to make our growth sustainable in the longer term. Ex US capex to peak in 2018

through active measures and demographics

Headcount reductions in the German footprint are largely secured

EXECUTE US TRANSACTION

Huge value creation opportunity. We supercharge DT's growth profile.

Expected accretive after 3 years

TMUS stock if excess cash is available

reflect growth in adjusted EPS. We will consider buybacks of DT and

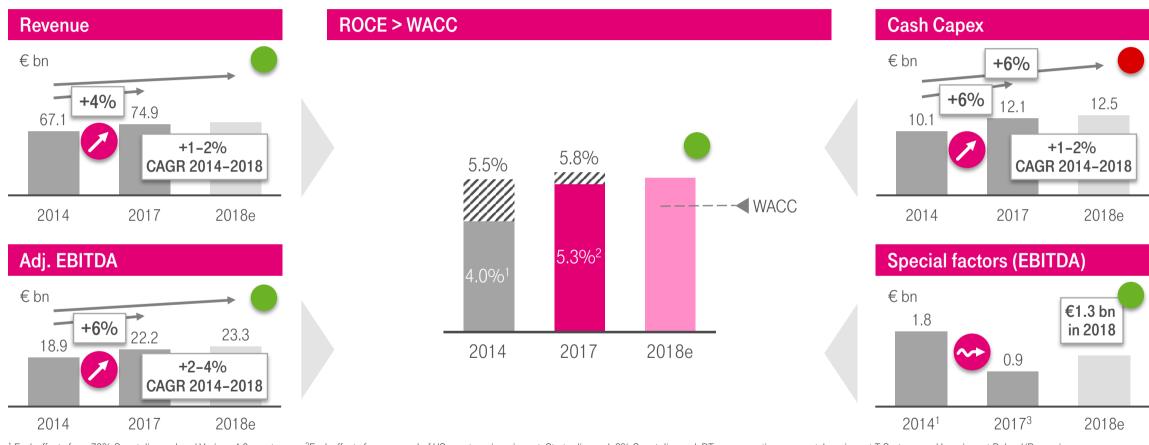
# **REVIEW 2014 - 2018**

# **FINANCE STRATEGY ACHIEVEMENTS 2014–2018**



<sup>&</sup>lt;sup>1</sup> Subject to necessary AGM approval and board resolution

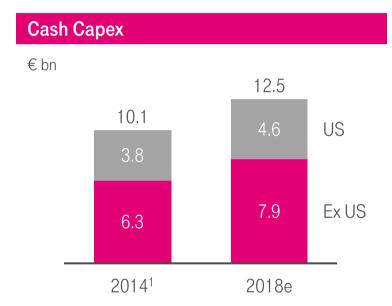
# **DELIVERING VALUE...**



<sup>&</sup>lt;sup>1</sup> Excl. effects from 70% Scout disposal and Verizon 4.0 spectrum <sup>2</sup>Excl. effects from reversal of US spectrum impairment, Strato disposal, 9% Scout disposal, BT compensation payment, Impairment T-Systems and Impairment Poland/Romania <sup>3</sup> Excl. effects from reversal of US spectrum impairment, Strato disposal, 9% Scout disposal and BT compensation payment.

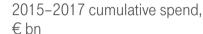
All figures based on a constant exchange rate of €1 = US\$1.13 (except ROCE); Revenue and EBITDA adj. figures are corrected for handset-lease

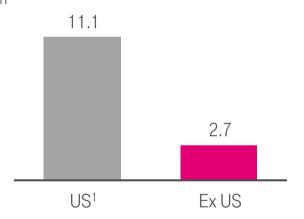
# ...WHILE INVESTING INTO FUTURE GROWTH



- US & Europe: Investments in mobile network leadership
- Ex US: Investments in fiber deployments and IP migration

#### **Spectrum**





- TMUS now has 40 MHz low-band
- US spectrum is a lifetime asset

#### Further investments...

...in customer growth



- Growth leader in US mobile and ex US mobile
- Low-band roll-out of
   ≈ €0.3 bn in 2018

#### ...in transformation



≈ €0.4 bn IP migration opex in 2018

...in innovation, e.g.



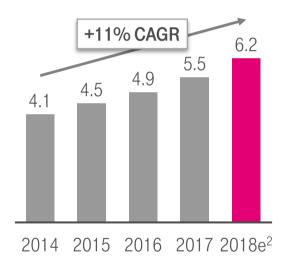
- loT €0.1 bn
- Layer 3 TV €0.1 bn

<sup>&</sup>lt;sup>1</sup> Based on a constant exchange rate of €1 = US\$1.13

# **DELIVERING FREE CASH FLOW AND DIVIDEND GROWTH**

#### Free Cash Flow DT group<sup>1</sup>

€ bn



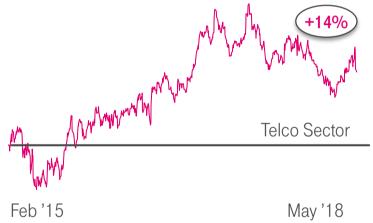
#### Dividends following FCF growth

€



#### **Relative TSR since last CMD**

%



**EUROPE GROUP STRATEGY GERMANY** SYSTEMS SOLUTIONS **TECHNOLOGY & INNOVATION T-MOBILE US GROUP DEVELOPMENT FINANCE** 

219

<sup>&</sup>lt;sup>1</sup> Before spectrum investment

<sup>&</sup>lt;sup>2</sup> Based on a constant exchange rate of €1 = US\$1.13 <sup>3</sup> Subject to necessary AGM approval and board resolution

# **CMD 2015 COMMITMENTS: WELL ACHIEVED**

#### **KEY FINANCIALS**

•	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

**Ambition level 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

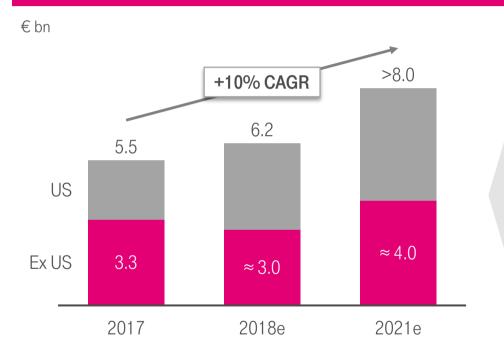
(2015-2018)

<sup>&</sup>lt;sup>1</sup> Compared to target of €1.8 bn

# STRATEGY 2018 - 2021

# 10% FCF GROWTH TO CONTINUE, DRIVEN BY BOTH US AND EX US

#### DT FCF in non US deal scenario

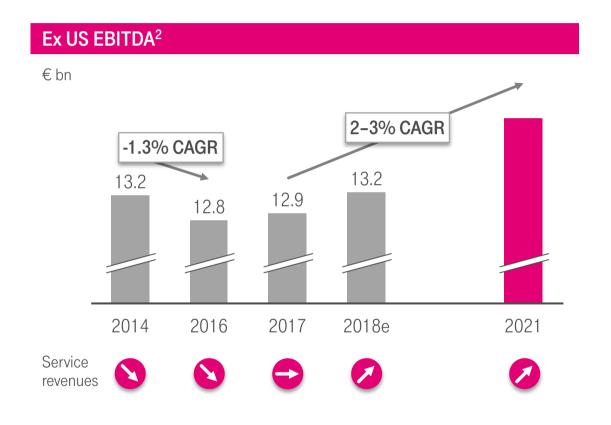


- Adj. EBITDA growth
- Improving balance sheet
- Ongoing tax benefits
- Adj. EBITDA growth
- Stable Cash Capex (2021 vs. 2017)
- Declining Special factors

2014-2021 FCF CAGR of 10%

# EX US EBITDA HAS TURNED AROUND AND IS GROWING

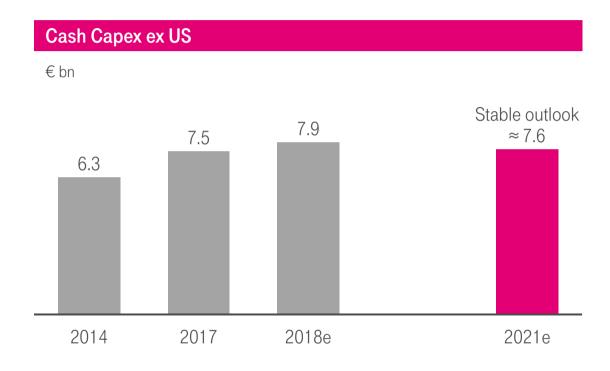
	Guidance	2017	2018	2019	2020	2021
Germany	2-2.5%	$\bigcirc$	$\bigcirc$			
Europe	1-2%		<b>⊘</b>	<b>⊘</b>	<b>⊘</b>	
GD	≈ 3-4%		( <b>( )</b> 1	<b>⊘</b>	<b>⊘</b>	<b>⊘</b>
TSI	≈ 5%			<b>⊘</b>		
DT ex US	≈2-3%	<b>⊘</b>	<b>⊘</b>	<b>⊘</b>	<b>⊘</b>	



EBITDA growth

<sup>&</sup>lt;sup>1</sup> Pre-accounting effects <sup>2</sup> Pro forma figures, adjusted for M&A

# **OUR EX US CAPEX PEAKS IN 2018**

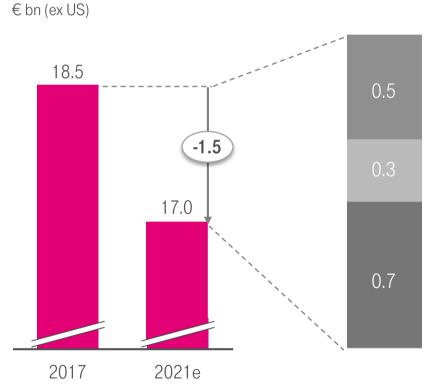


#### **Drivers**

- Invest in fiber/IP migration
- TSI with ca. 0.2 bn one-off spends in 2018
- 2018 vs. 2017 increase also reflects greater tower spend (€0.1 bn)

# TARGETING €1.5 BN OF NET INDIRECT COST REDUCTIONS EX US

#### Net indirect cost reduction & composition of savings



Internal Workforce Costs by automation & operational excellence: gross reduction of ≈ 13 k FTEs already secured by YE 2018

**External Workforce Costs** by automation & operational excellence: high flexibility due to total base of 10k FTEs German labour force

Non-Headcount OPEX, e.g.<sup>1</sup>

- ≈ €0.2-0.3 bn real estate
- ≈ €0.3 bn platform retirements
- ≈ €0.1-0.2 bn shared services savings
- ≈ €0.2 bn procurement improvements

#### Across all segments



-€0.8 bn



-€0.4 bn

**T**··Systems·

-€0.1 bn



-€0.2 bn

(incl. GROUP DEVELOPMENT)

<sup>1</sup> Gross savings

# **GHS TO SUPPORT SEGMENT COST SAVINGS**





Savings enabled by desk sharing, standardization & modularization:

- Reduce vacancies by 50%
- 20% less office & technical space
- Reduced facility management costs

#### Efficient shared services<sup>1</sup>

€bn

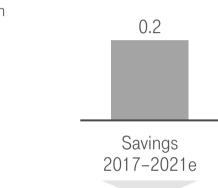


€0.1 bn savings already delivered since CMD 2015, further measures planned, e.g.:

- Near Shoring and reducing locations (95 to 5)
- Further reduce demand & OPEX by > €0.1 bn through simplification & automation
- Standardization level of one.ERP > 85%

#### Reducing purchasing costs<sup>1</sup>

€bn



Innovative sourcing approaches will reduce external spend supported by Buyln:

- Optimize technology maintenance costs by 10% through stronger harmonization
- Apply new commercial model to reduce media spend by > 10%
- Up to 20% reduction of rates for Data Center facilities

<sup>&</sup>lt;sup>1</sup> Gross savings

# CENTRAL PROGRAM (FIT4FUTURE) IMPROVES CUSTOMER EXPERIENCE AND SUPPORTS COST SAVINGS

SIMPLIFY

DIGITALIZE

#### **Approach**

#### Group-wide program

- Driven by all Board members personally
- Leveraging cross-segment experience and capacity
- Focus on implementation

#### **Goals & benefits**



PUSH CUSTOMER EXPERIENCE



#### Key levers supporting segment initiatives



#### **OPERATIONAL EXCELLENCE**

Smart & lean processes accelerated with robotic process automation



#### PRODUCT SIMPLIFICATION

Simple products, smart customer processes & next generation IT



#### **AGILE & FUTURE-PROOF ORGANIZATION**

Simplified & reduced overhead structure



#### **DIGITAL CUSTOMER TOUCHPOINTS**

One user-friendly app & web interface centrally developed for all customer interactions



#### **ZERO DEFECT SERVICE**

Predictive servicing and maintenance



#### **DATA-DRIVEN NETWORK ROLLOUT**

Return maximizing network rollout based on big data & artificial intelligence



#### **ADVANCED ANALYTICS & DATA GOVERNANCE**

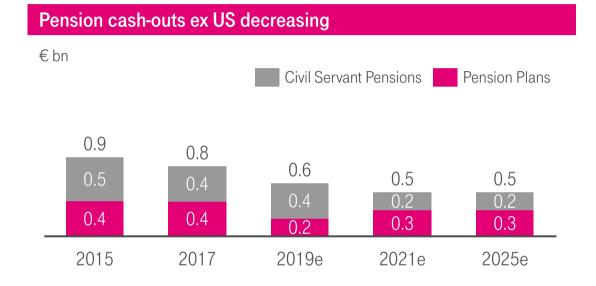
Next level analytics skills, data architecture & governance to leverage scalability

## DEMOGRAPHICS TO INCREASINGLY SUPPORT COST SAVINGS

2025e

# Personnel Special Factors (Cash) ex US € bn 1.0 1.1–1.2 0.8–0.9 ≈ 0.5

2021e



■ ≈ 10 k FTEs off payroll 2020–2025 already secured

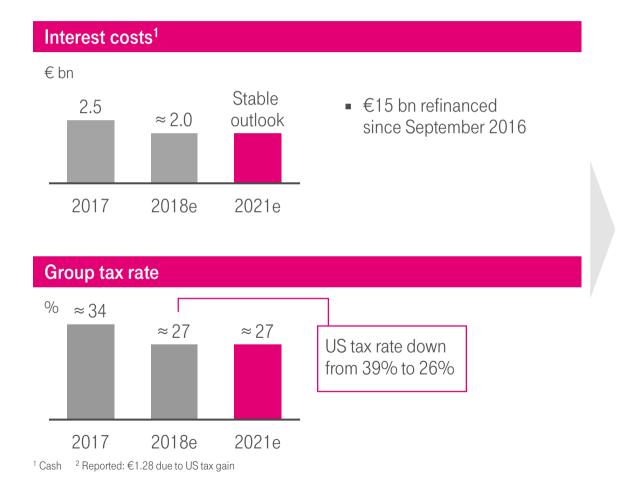
2018e

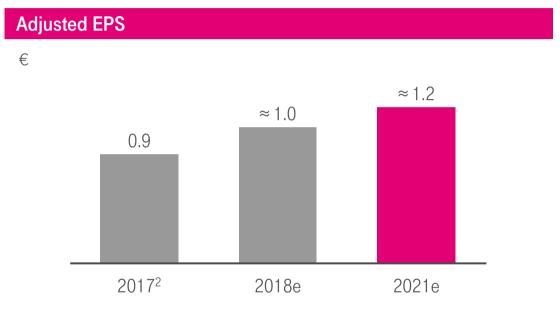
2017

 Natural attrition region Germany from 1% in early 2020s up to 4% Eo2020s

- Payments for the civil servant pensions to decrease over time
- No volatility expected as number of civil servants is decreasing (no new hires) and contribution is fixed

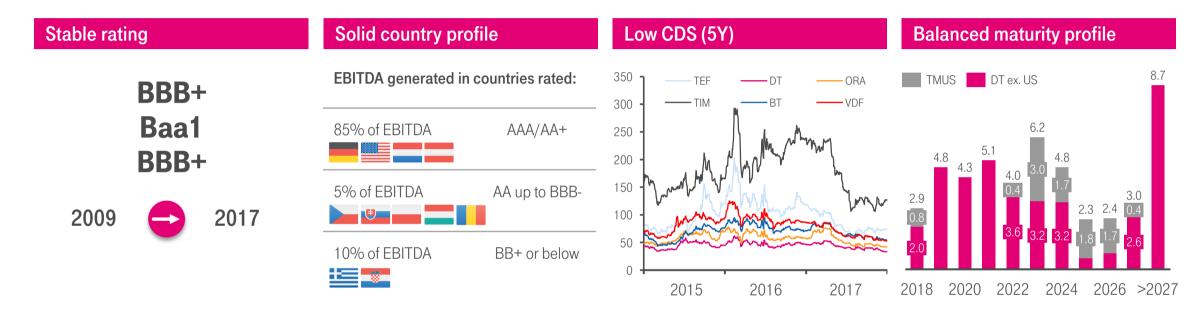
# STABLE INTEREST COSTS AND REDUCED TAX RATE PAY INTO 20% ADJ. EPS GROWTH





- Unadjusted EPS to exceed €1 by 2021
- Lower growth vs. FCF reflects (US) minorities
- Share purchases potentially accretive

## **DEBT - DT REMAINS ANCHOR OF STABILITY**



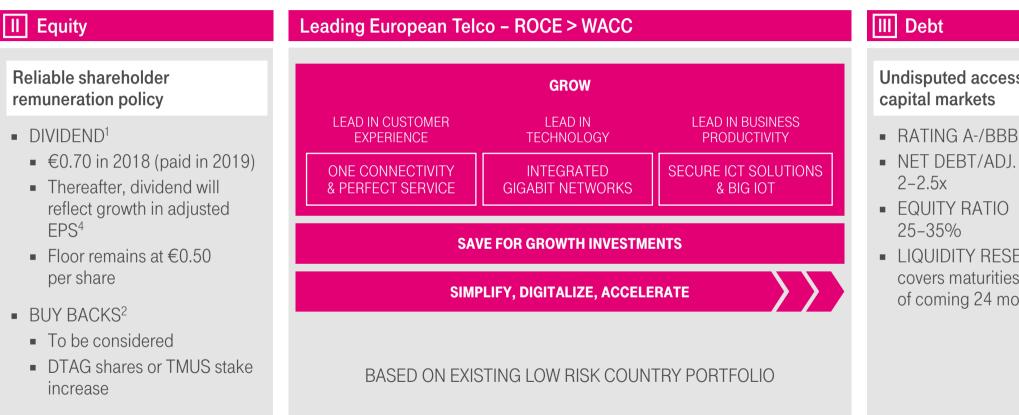
Debt policy remains unchanged

Undisputed access to debt capital markets

Rating: A-/BBB Net debt/adj. EBITDA: 2.0–2.5x

**Equity ratio:** 25–35% **Liquidity reserve:** covers maturities of next 24 months

### **OVERVIEW FINANCIAL STRATEGY**

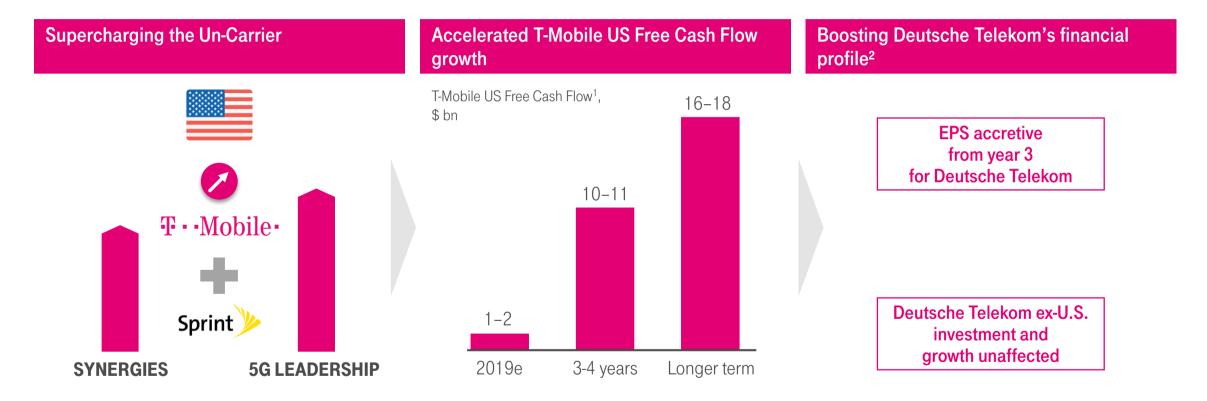


Undisputed access to debt

- NFT DFBT/ADJ, FBITDA<sup>3</sup>
- FQUITY RATIO
- LIQUIDITY RESERVE covers maturities of coming 24 months

<sup>&</sup>lt;sup>1</sup> Subject to necessary AGM approval and board resolution <sup>2</sup> Not relevant for first 3 years in US deal scenario <sup>3</sup> Only a short departure from comfort zone in US deal scenario <sup>4</sup> Adj. EPS 2018 as starting point

## **BOOSTING DEUTSCHE TELEKOM'S FINANCIAL PROFILE...**

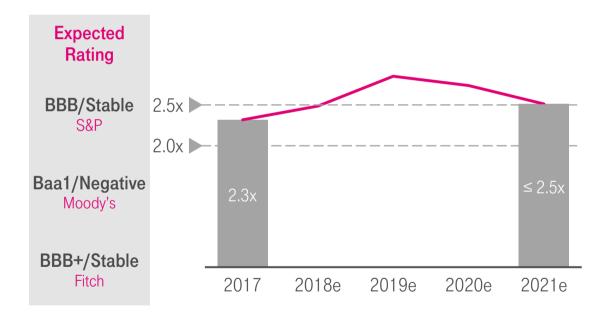


<sup>&</sup>lt;sup>1</sup> Defined as Cash Flow from Operations less Capital Expenditures <sup>2</sup> Assumption: closure date Jan. 1<sup>st</sup>, 2019

## ...BASED ON A ROBUST FINANCIAL FRAMEWORK

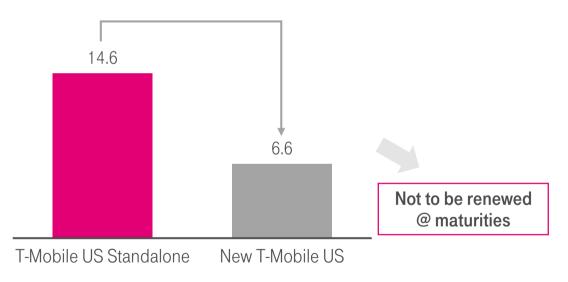
#### Only a short departure from our "Comfort zone"

Deutsche Telekom Group Net Debt/Adj. EBITDA



#### Phasing out parental funding

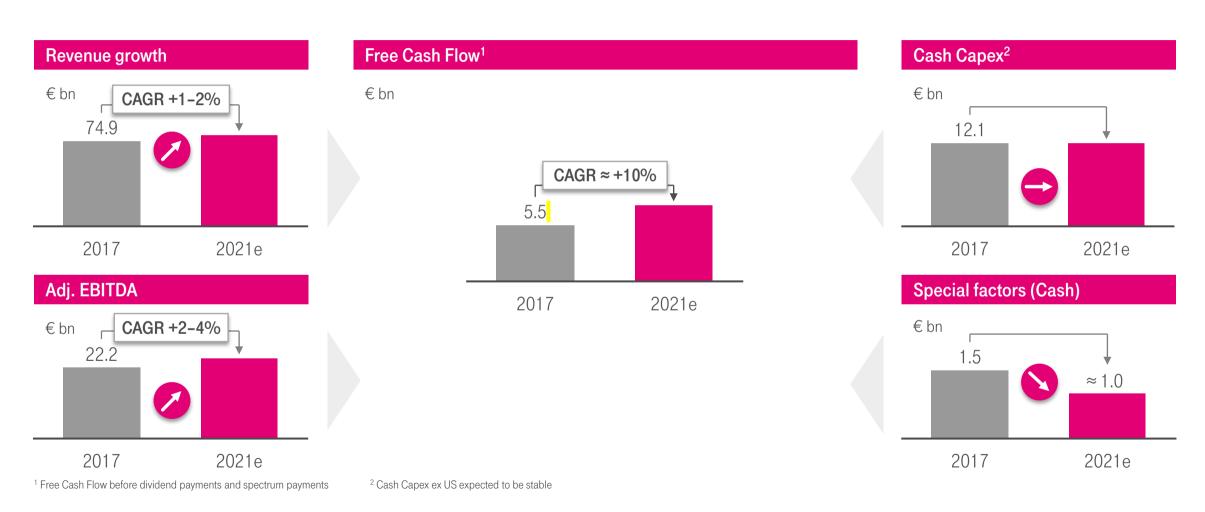
Deutsche Telekom Parental Funding to T-Mobile US, \$ bn



#### T-MOBILE US STRICTLY STANDALONE FUNDING GOING FORWARD

# FINANCIAL OUTLOOK

# **FINANCIAL OUTLOOK**



# MID TERM AMBITION LEVEL

# **MID TERM AMBITION LEVEL**

	Mid term ambition level <sup>1</sup>	Year	Implications of US deal <sup>2</sup>
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) <sup>3</sup>	Dividend will reflect growth in adjusted EPS. Floor remains at €0.50 per share	2017-2021e	Confirmed

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

<sup>&</sup>lt;sup>3</sup> 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.