

# Germany

Srini Gopalan

CAPITAL  
MARKETS  
DAY 2021

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In addition to figures prepared in accordance with IFRS, Deutsche Telekom also presents alternative performance measures, including, among others, EBITDA, EBITDA margin, adjusted EBITDA, adjusted EBITDA after leases, adjusted EBITDA margin, adjusted EBIT, adjusted net income, free cash flow, free cash flow after leases, gross debt, net debt after leases and net debt. These alternative performance measures should be considered in addition to, but not as a substitute for, the information prepared in accordance with IFRS. Alternative performance measures are not subject to IFRS or any other generally accepted accounting principles. Other companies may define these terms in different ways.

# Key messages

01

## Undisputed market leader

We have delivered, despite a tough IP migration and Covid-19 headwinds. The tailwinds we have created will contribute significantly to growth going forward

02

## Accelerating infrastructure

By 2024 we will have  $\approx 10$  mn Fiber homes passed and  $\approx 97\%$  5G coverage. We are quite progressed in sourcing external funding to further enhance our build

03

## Accelerating B2C growth

Convergence and monetizing our base will drive consumer loyalty and revenue growth

04

## Accelerating B2B growth

A rapidly digitalizing economy and our unique position in it will drive B2B revenue growth

05

## Accelerating digitalization

Full stack digitalization will drive a step change in Cost efficiency

06

## Accelerating EBITDA & ROCE

We will self-fund our investments through accelerating EBITDA growth to  $+2.5\text{--}3\%$ <sup>1</sup> and Capex efficiency. ROCE will grow to significantly  $> \text{WACC}$

<sup>1</sup> CAGR 2020–2024e

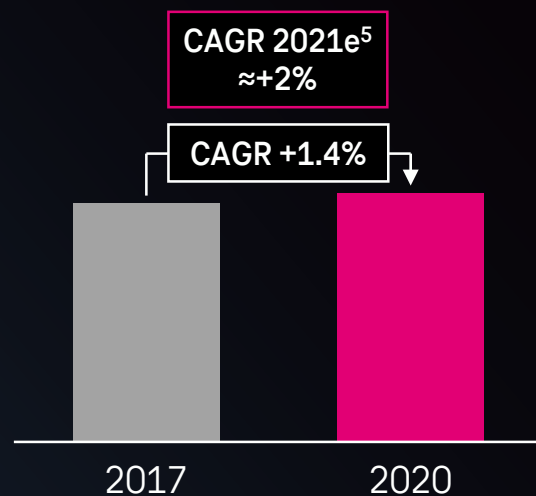
# Review 2017–2021



# We have delivered, despite IP migration and Covid-19 headwinds

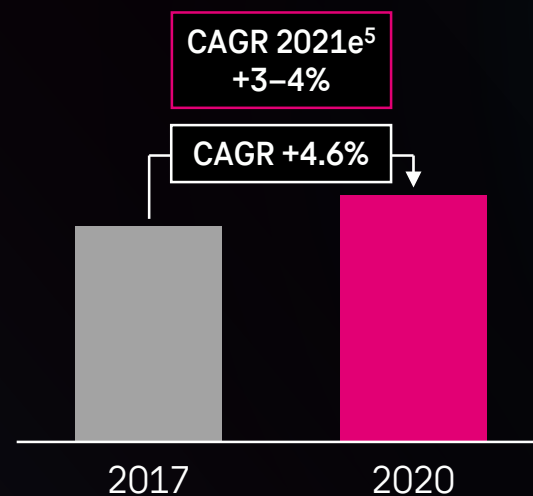
## Mobile service revenue<sup>1</sup>

€ bn



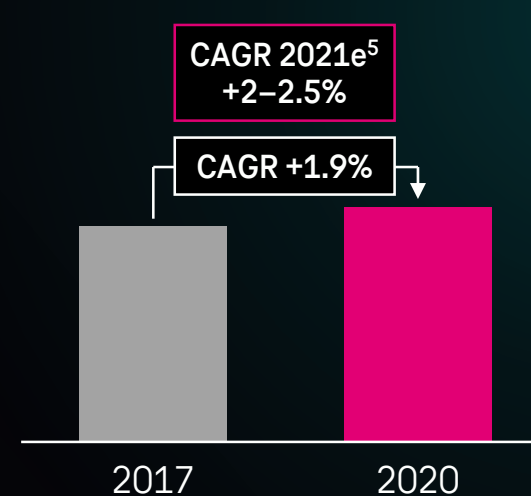
## Broadband revenue<sup>2</sup>

€ bn



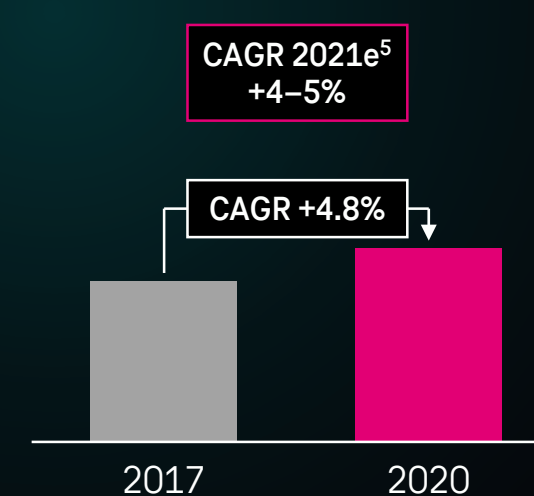
## Adj. EBITDA (AL)<sup>3</sup>

€ bn



## Cash contribution (AL)<sup>4</sup>

€ bn



<sup>1</sup> CAGR adjusted for IFRS 15 impact    <sup>2</sup> Including business IP products (e.g. DLAN, Company Connect); CAGR adjusted for IFRS 15 impact; growth 2017-2021e without definition change approx. 1pp lower  
<sup>3</sup> CAGR not adjusted for IFRS 15 impact    <sup>4</sup> Cash contribution (AL) = Adj. EBITDA (AL) - Cash Capex - Special factors (Cash)    <sup>5</sup> Ambition level 2017-2021e

# IP migration headwinds are becoming tailwinds



MIGRATION COSTS



FORCED CHURN



GROSS SAVINGS



CUSTOMER EXPERIENCE

2017 • from headwind • 2020 • to tailwind • tomorrow

## PROOF POINTS



> 60%  
Line losses  
reduced



> 30%  
Amount of installations  
decreased



-0.5%  
Revenue drag  
disappears

Note: comparison of yearly average 2017–2019 vs. 2020



# Our track record on operational execution has been strong

Undisputed  
market leader  
in Germany

# #1



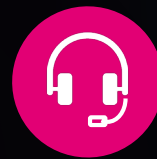
**Record high**  
First contact  
resolution rate  
+22pp



**Accelerated**  
Time2market  
-15 months



**Record high**  
customer  
satisfaction  
+7 pts in TRI\*M



**Significantly reduced**  
Complaints  
-66%

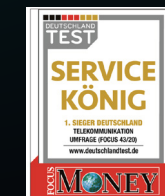


**Increased**  
IT stability  
almost doubled



**Record low**  
Churn  
in fixed and  
mobile

## Winner of all relevant tests in service, network & brand



Note: Number referring to development 2017–2020



GROUP STRATEGY

GERMANY

EUROPE

T-MOBILE US

TECHNOLOGY & INNOVATION

SYSTEMS SOLUTIONS

GROUP DEVELOPMENT

FINANCE

# CMD 2018 commitments: We delivered!

	Ambition level 2017–2021e	Achievements 2020 <sup>6</sup>	2017–2021e
<b>Lead in customer experience</b>	<ul style="list-style-type: none"> <li>#1 in Mobile service revenue: CAGR ≈+2%<sup>1</sup></li> <li>#1 Broadband revenue: CAGR +3–4%<sup>2</sup></li> <li>MagentaEINS share of Broadband households: ≈30%</li> </ul>	<ul style="list-style-type: none"> <li>+1.4% (+2.2% excl. Covid-19)</li> <li>+4.6%</li> <li>≈26%</li> </ul>	<ul style="list-style-type: none"> <li>●</li> <li>●</li> <li>●</li> </ul>
<b>Lead in business productivity</b>	<ul style="list-style-type: none"> <li>B2B revenue growth by +€500 mn</li> </ul>	<ul style="list-style-type: none"> <li>+€110 mn (+€350 mn excl. Covid-19)</li> </ul>	<ul style="list-style-type: none"> <li>●</li> </ul>
<b>Lead in technology</b>	<ul style="list-style-type: none"> <li>Ramping up to 2 mn households p.a.</li> </ul>	<ul style="list-style-type: none"> <li>ca. 1.2 mn households in 2021e</li> </ul>	<ul style="list-style-type: none"> <li>●</li> </ul>
<b>Value transformation</b>	<ul style="list-style-type: none"> <li>Reduction of adj. indirect cost (AL)<sup>3</sup> by €1 bn</li> </ul>	<ul style="list-style-type: none"> <li>€1 bn (2021e)</li> </ul>	<ul style="list-style-type: none"> <li>●</li> </ul>
<b>Financials</b>	<ul style="list-style-type: none"> <li>Revenue growth: CAGR &gt; 1%<sup>4</sup></li> <li>Adj. EBITDA (AL) growth: CAGR +2–2.5%<sup>4</sup></li> <li>Cash contribution (AL)<sup>5</sup> growth: CAGR +4–5%</li> </ul>	<ul style="list-style-type: none"> <li>0.0% (+0.4% excl. Covid-19)</li> <li>+1.9%</li> <li>+4.8%</li> </ul>	<ul style="list-style-type: none"> <li>●</li> <li>●</li> <li>●</li> </ul>

<sup>1</sup> CAGR adjusted for IFRS 15 impact    <sup>2</sup> Including business IP products (e.g. DLAN, Company Connect); CAGR adjusted for IFRS 15 impact; growth 2017–2021e without definition change approx. 1pp lower

<sup>3</sup> Germany incl. GHS, 2017–2021e    <sup>4</sup> CAGR not adjusted for IFRS 15 impact    <sup>5</sup> Cash contribution (AL) = Adj. EBITDA (AL) – Cash Capex – Special factors (Cash)

<sup>6</sup> Actual results 2017–2020, or respectively actuals 2020



# Strategy 2021–2024



# Our growth levers



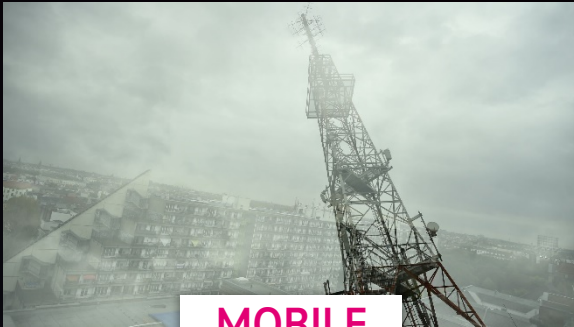
## FROM

<b>01 Networks</b>	Leadership in FTTC and 4G
<b>02 B2C</b>	Product leadership
<b>03 B2B</b>	Market leading one-stop-shop
<b>04 Digitalization</b>	Digital initiatives
<b>05 People, society &amp; environment</b>	Good corporate citizen
<b>06 Outcome</b>	18 quarters of EBITDA growth

## TO

Leadership in gigabit networks with FTTH and 5G
Loyalty driven growth
Software-driven digitalization
Scale digitalization along the entire value chain
ESG as differentiator
Accelerating EBITDA and ROCE growth

# We are undisputed network leaders



**MOBILE**



**FIXED**

**5G**

**80%** coverage



**32,500** mobile sites



**70 Mbps** average mobile speed



**83%** Fiber coverage



**> 600,000 km** Fiber



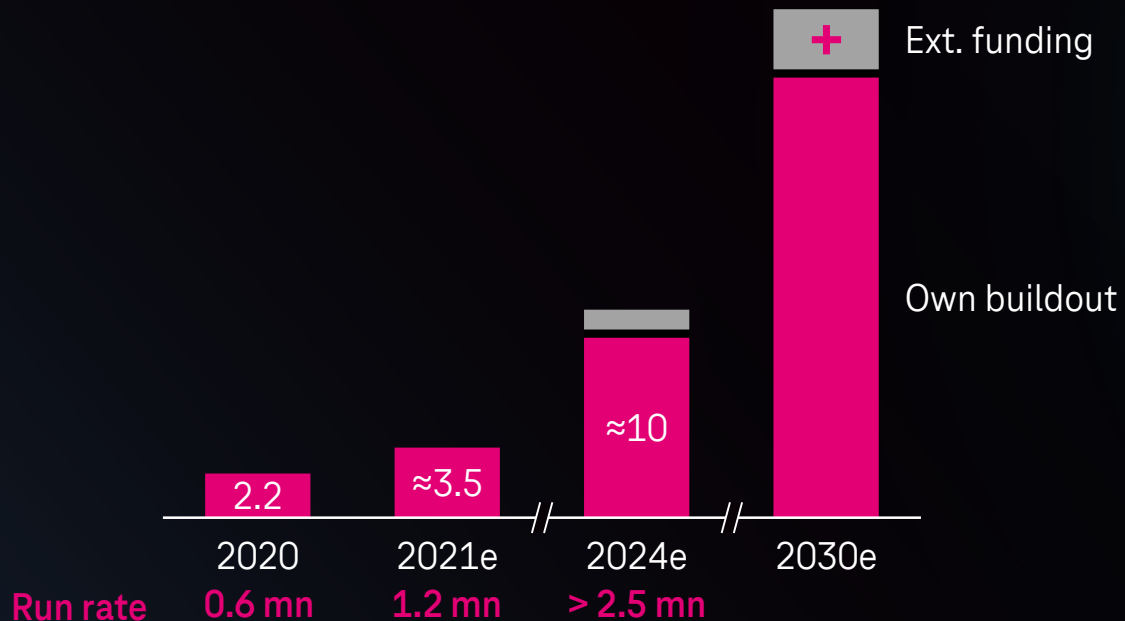
**> 40 Mbps** average upload speed<sup>1</sup>

Note: Figures per Q1/2021 <sup>1</sup> With Supervectoring

# We will build a future-proof Fiber network for Germany

## Our FTTH rollout in Germany

Homes passed, mn



**Germany covered with FTTH by 2030**

## OUR STRATEGY

### Build speed consistent with pace of demand growth

- Vectoring outperforming competition
- Focus on areas of greatest bandwidth needs
- Clear DT leadership in “terminal” year

### Execution leadership

- Regional structure with 13,000 employees
- Building at a pace of > 2.5 mn households p.a.

### Flexibility and agility

- Self-funded rollout
- External funding in addition
- Restrict “cherrypicking”

# We are de-averaging our build to keep pace with demand

## Focus on attractive municipalities

- Public support, market share, build costs
- Target housing associations
- Benefit from abolishment of rental cost privilege

≈55%<sup>1</sup>

e.g. Berlin, Düsseldorf, Hamburg

## Choose best approach

- Collaborations with local partners
- Wholebuy
- Overbuild

≈15%<sup>1</sup>

e.g. collaboration Glasfaser Nordwest

DT Fiber footprint

Yes



No



Yes

No

## Progressively build out

- Counteract cherry-picking
- Leverage subsidies (from 2023ff)

≈20%<sup>1</sup>

e.g. Bad Salzungen, Freiberg, Ilmenau

## Participate in subsidized deployments

- Participation in 80% of subsidy tenders

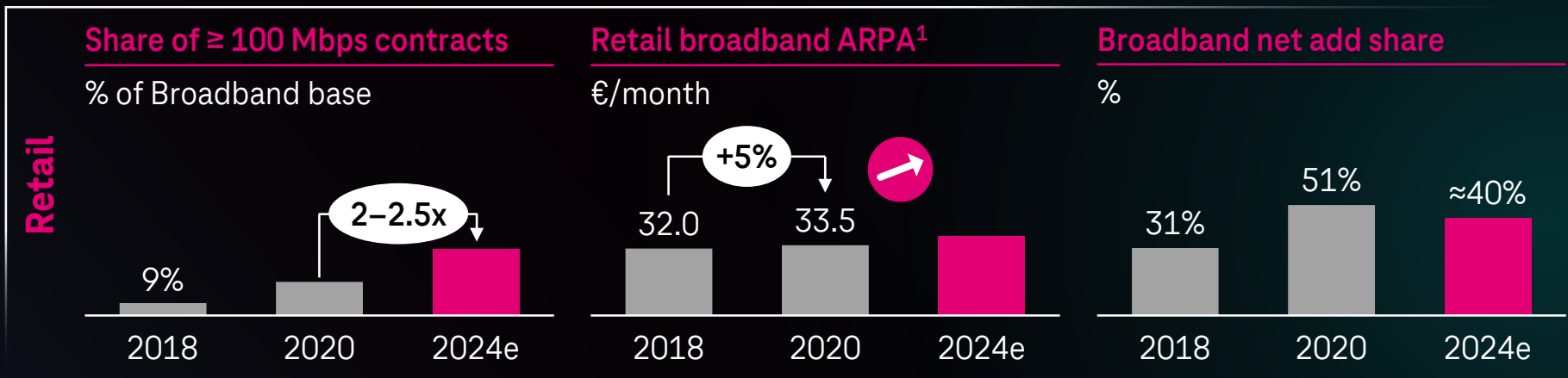
≈10%<sup>1</sup>

e.g. Oschatz, Grimmen, Wolfschlugen

Third party infrastructure (Coax, FTTH, FTTC)

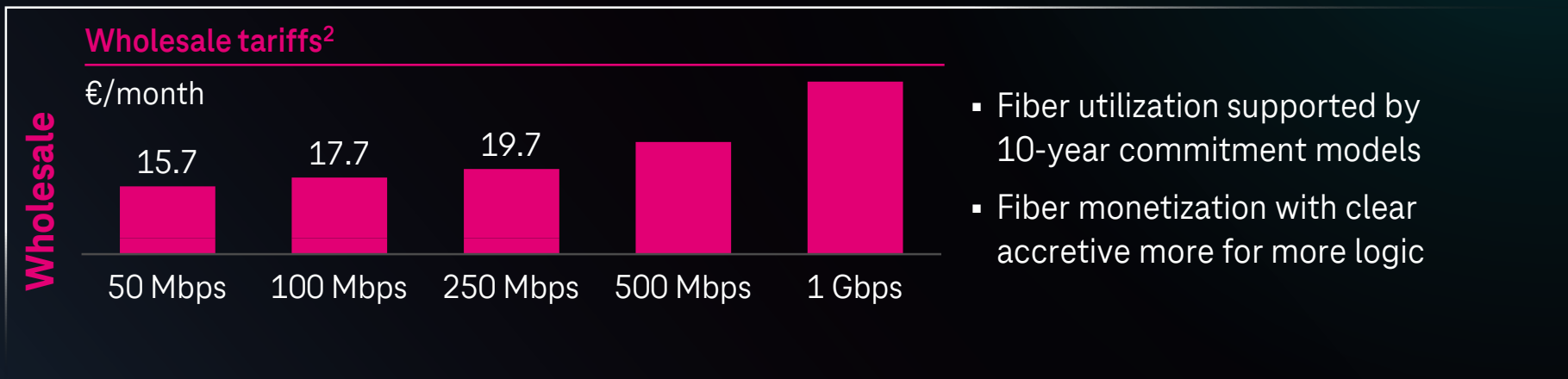
<sup>1</sup> Share of households in Germany

# Leveraging our retail and wholesale customer base will drive ARPA and Fiber utilization



## AMBITION 2024e

Broadband revenue: CAGR > 4%



Wholesale access revenue: stable

<sup>1</sup> B2C only, 2018 and 2020 Q4 figures    <sup>2</sup> Calculatory fees for Layer2 bitstream access incl. upfront investment (as calculated by the BNetzA)

# We are systematically driving Capex efficiency

## Improving our rollout efficiency



### Scale advantage

- “Fiber Factory” with 13,000 employees for large-scale rollout
- Faster rollout with standardized processes



### Digitalization of planning process

- Digital planning tools
- Leverage of VR technology (e.g. “T-Cars”)



### Long term vendor relationships

- Long-term relationships with large vendors
- Turnkey models to leverage external partners



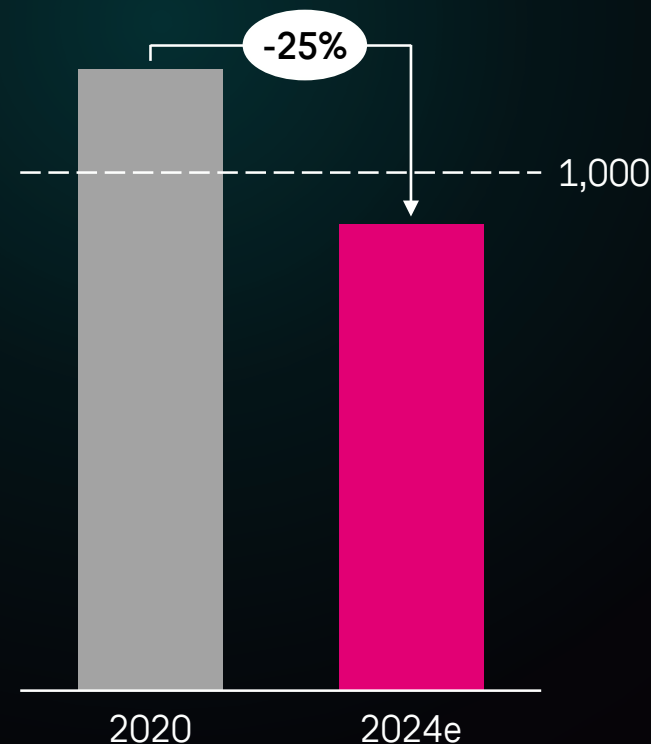
### Improved local rollout conditions

- New rollout techniques (e.g. micro-trenching, digital approval processes) and approaches (e.g. poles, reduced depth)
- Highest buildout costs in Europe due to building restrictions

## AMBITION 2024e

### FTTH unit cost

€/home passed

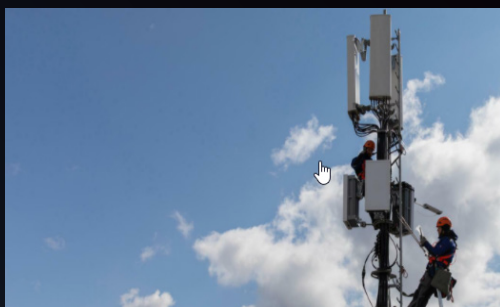


# We will accelerate our 5G leadership



## Best coverage & speed

- Most spectrum deployed & most dense mobile network
- Lead in 3.6 GHz buildout
- > 75% Fiber backhaul & superior active equipment



## Efficient deployment

- Shut down 3G & prepare frequencies for 5G refarming
- Leverage big data and geo-spatial analytics for optimized network densification
- Add small cells into deployment mix



## Monetize infrastructure

- Defend fair market share
- Upselling base to 5G/Magenta brand & remain committed to more-for-more
- Grow in IoT/Campus networks: potential of low triple digit millions by 2024e



## AMBITION 2024e

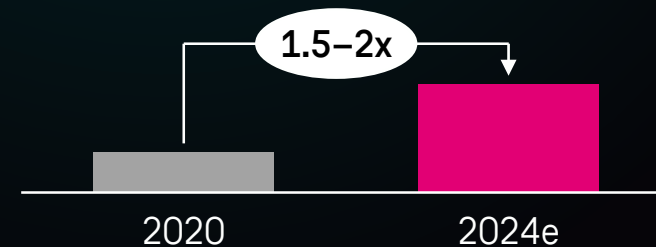
### Average mobile speed

Mbps



### B2C share of L/XL customers

%





# We have been leading in product, brand and service experience



## OUR PROOF POINTS

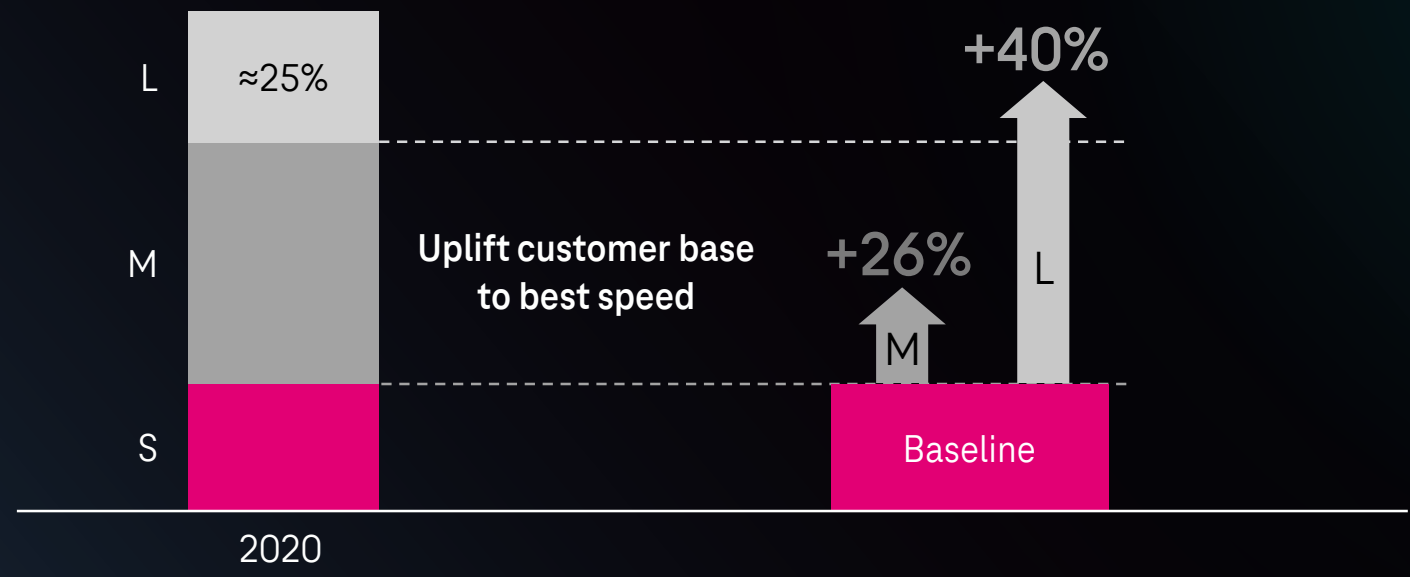
- ✓ **Undisputed market leadership**  
Multibrand-strategy > 26 mn Mobile customers;  
> 11.6 mn Broadband customers; > 3.7 mn TV customers
- ✓ **FMC leadership**  
Integrated customers > 5 mn MagentaEINS
- ✓ **Best customer experience**  
All time high in TRI\*M and increased on-time delivery by 4pp  
(2017–2020)
- ✓ **Accelerated self-service and automation**  
30% shifted calls to digital, app usage of 56%
- ✓ **Brand achievement**  
89% of our customers acknowledge the high quality of our services

# Upgrading our existing customers to the best product is at the heart of loyalty driven growth

## Our strategy

Broadband customer share

Customer satisfaction  
Average increase in TRI\*M

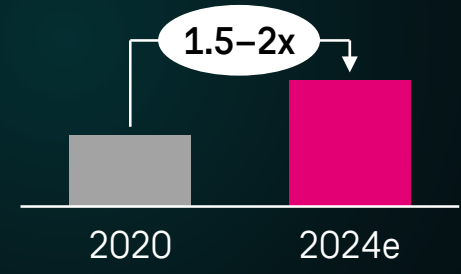


## AMBITION 2024e

### Upsell Mobile customers



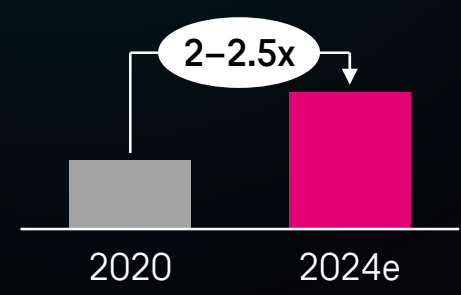
Share of customers in L/XL tariffs



### Upsell Broadband customers



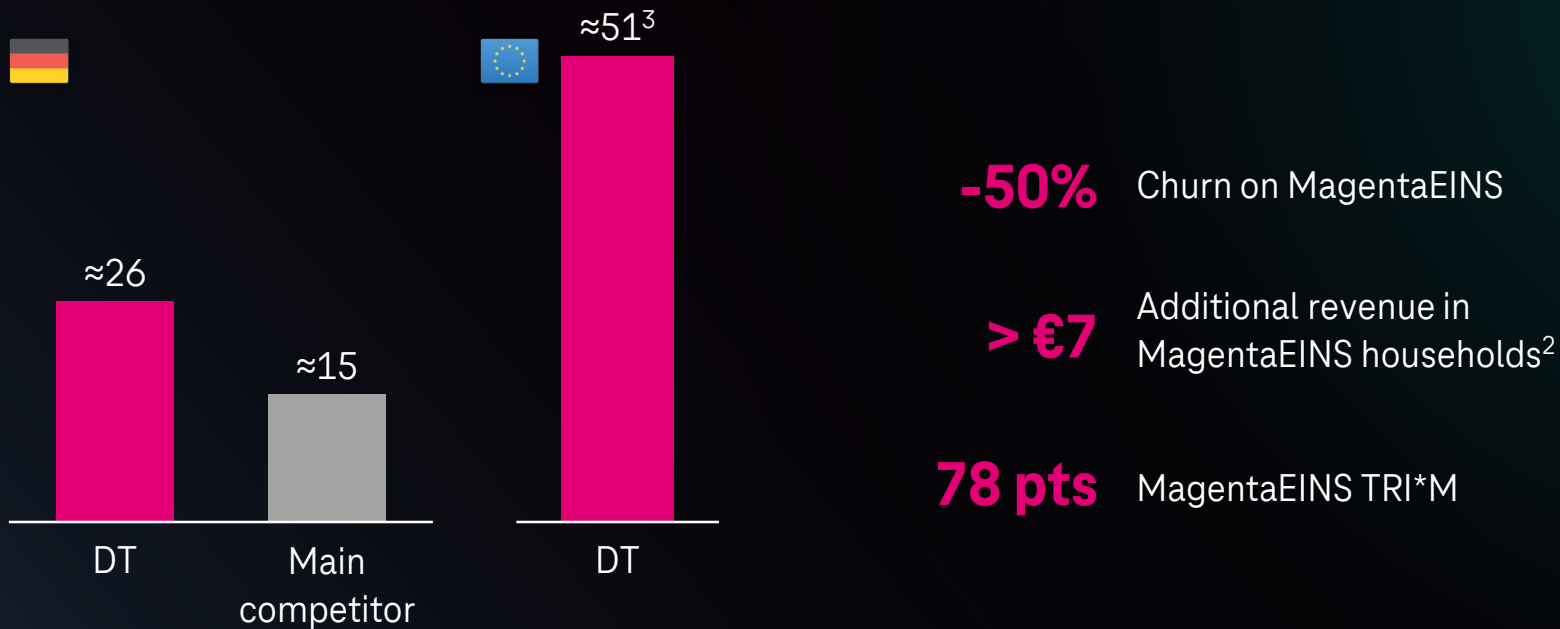
Share of customers with ≥ 100 Mbps



# Accelerating MagentaEINS will scale loyalty driven growth and improve market structure

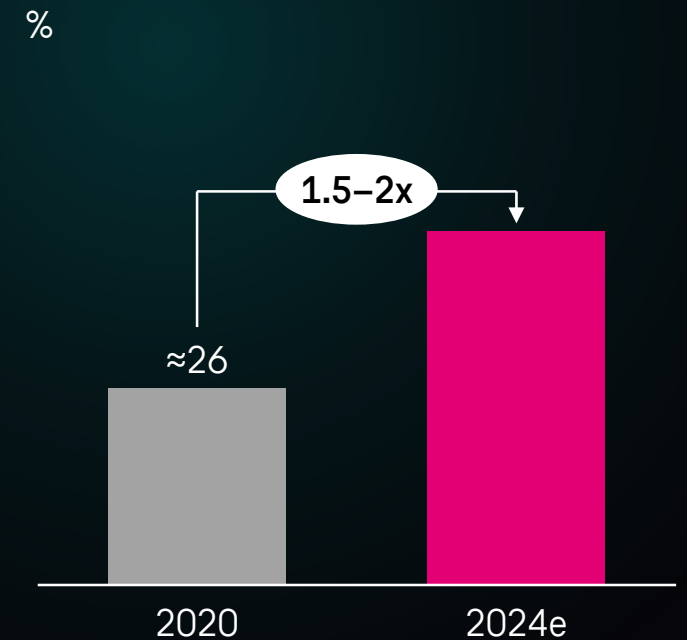
## Our strategy

Percentage of Broadband households with FMC bundles, %<sup>1</sup>



## AMBITION 2024e

Percentage of Broadband households with FMC bundles



<sup>1</sup> Status 2020   <sup>2</sup> Compared to non-convergent households   <sup>3</sup> End of 2020 in AT, CZ, GR, HR, HU, ME, MK, PL, SK

# Our converged household experience will be hard to replicate



Seamlessly connected and easily managed products

## Integrated experience



The best TV experience and content in one place

## Best TV product



Best-in-class network and the fastest WIFI in all corners

## Best network



# Our market leadership in business is based on strong pillars

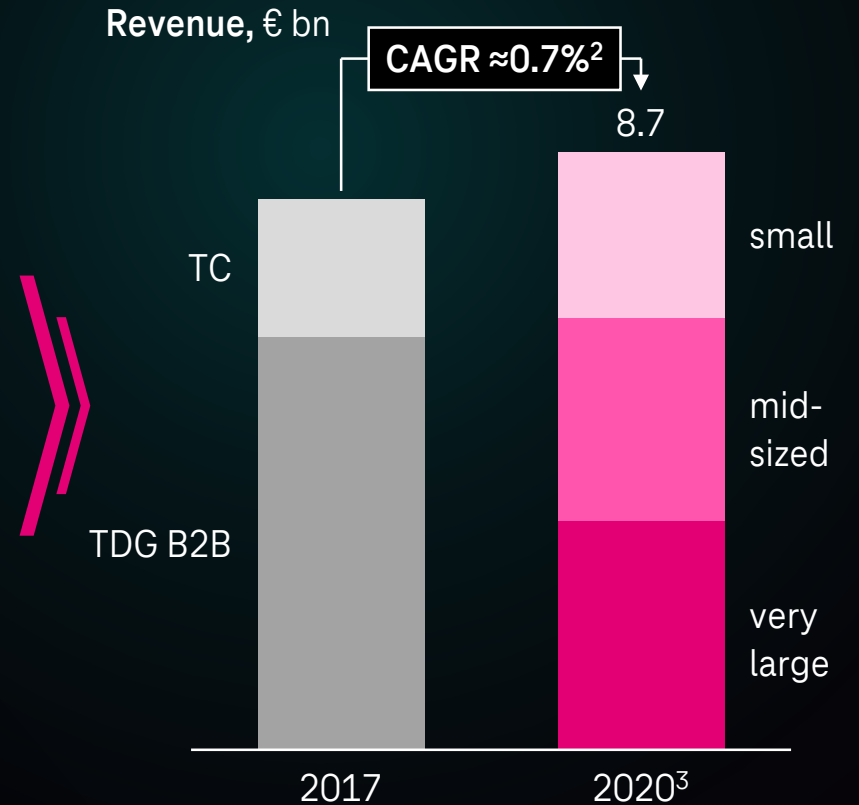
Trusted partner for connectivity and digitalization

## Strong track record

<b>Market leadership</b> 	<b>Best services</b> 	<b>Strong partners</b> 	<b>Customer satisfaction (TRI*M) B2B</b> <b>77 pts<sup>1</sup></b>
<b>IT/cloud growth</b> 	<b>Mobile M4M</b> 	<b>Hosted PBx</b> 	<b>IT revenue growth</b> <b>+13%</b> 2017–2020

## Strong headwinds

<b>Managing TC integration</b>	<b>Leveraging IP migration</b>	<b>Covid-19 impact in roaming</b>	<b>Revenue impact due to Covid-19</b> <b>€240 mn</b>
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<sup>1</sup> Incl. TC integration    <sup>2</sup> Ex 2020 Covid-19 impact of approx. €0.2 bn would have been CAGR  $\approx 1.6\%$     <sup>3</sup> As reported; before IoT GmbH integration

# Customer example for ecosystem



# We are very well positioned to benefit from the digitalization of the economy and our customers

## GROWTH DRIVERS

Acceleration of digitalization in SME/public & adoption of digital products  
e.g. IoT, Campus networks and SDx

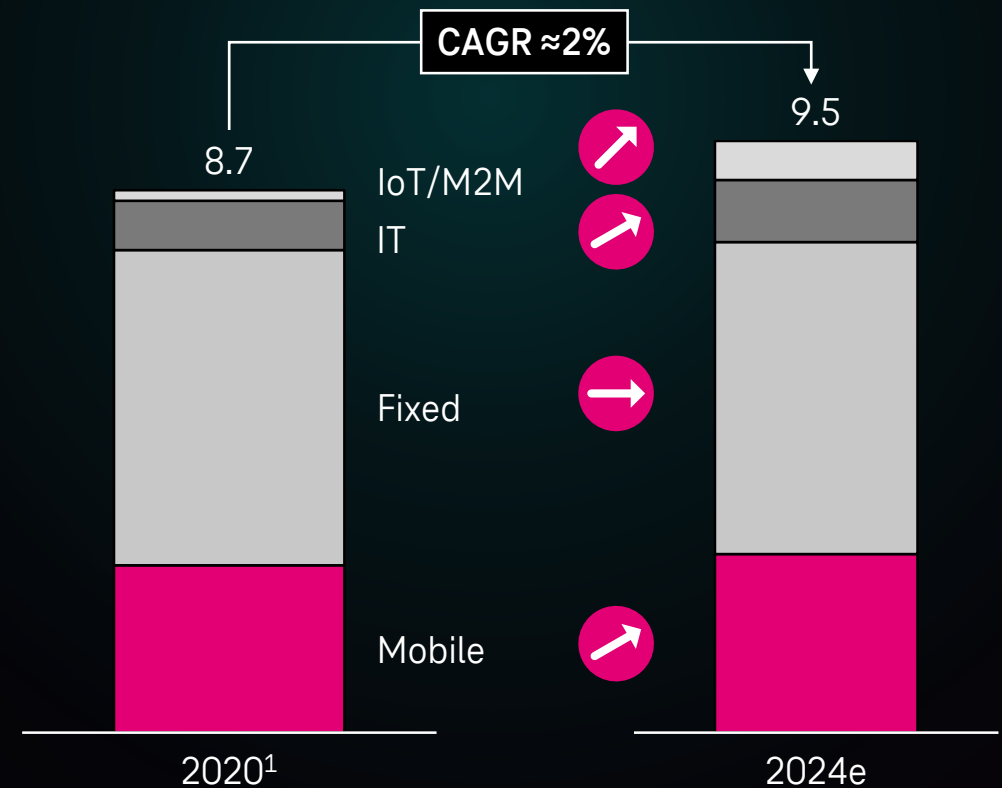
Headwinds of IP migration become tailwinds; roaming recovery

Go to market benefits of TC integration



TDG B2B revenue

€ bn



<sup>1</sup> Organic; after IoT GmbH integration

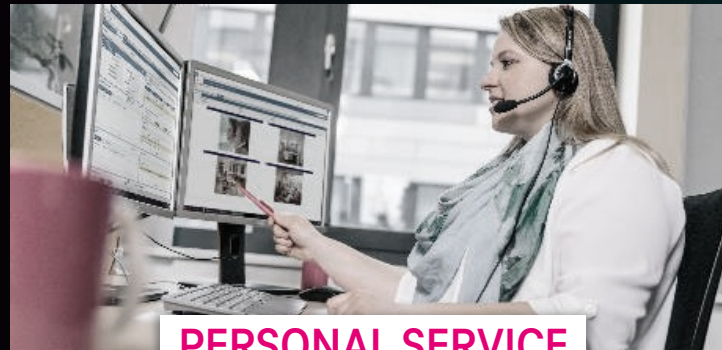
# We will combine the best of digitalization and human expertise

## AMBITION 2024e



**DIGITAL SERVICE**

Boost digitalization for all frontline agents with **MagentaView** by 2022



**PERSONAL SERVICE**

Push **omni-channel** & up-skill all **frontline people for sales and service** by 2022

**60%**

First contact resolution (+8pp vs. 2020)

**> €200 mn**

Savings through automated transactions

**69 pts**

Customer satisfaction (TRI\*M) TDG



Leading bot farm in the European telco industry

**> 3,000 Bots**



Integrated sales & service to serve our customers out of one hand



# We are digitalizing the full stack

## AMBITION 2024e

Digital-first customer experience & service ops

B2C, B2B & B2B2C customer journeys

### Remote provisioning

Remote check and support in the deployment of complex solutions by our experts



**+17pp**

Share of chat interactions

Telco as a platform: scalable software integration layer

Product & service orchestration

Network orchestration

Security

Unified data & analytics engine

### Predictive maintenance

360-degree view of the entire home network, devices and setup, as well as predictive optimizations and customer support



**≥ 55%**

First time right/fault repair

Assets and capabilities via microservices

### Cloud-based workloads

Fully automated network services in cloudified production (TV, Voice, Data)



**67%**

Cloudified workload

Network production: disaggregation & automation

Fixed access

Mobile access

### Value based network rollout

Data-based and automatized rollout decisions enable efficiency



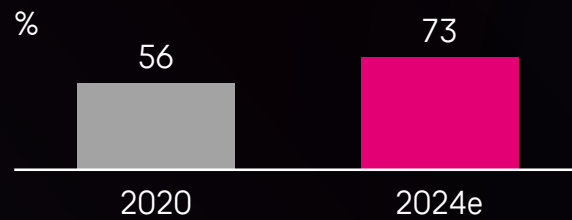
**-75%**

Faster structural planning/hours

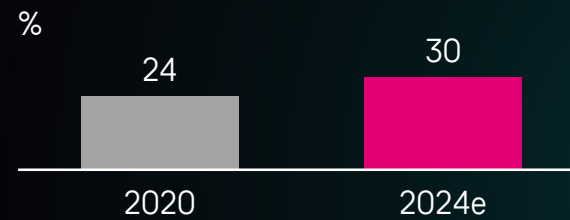
# Full stack digitalization leads to significant benefits



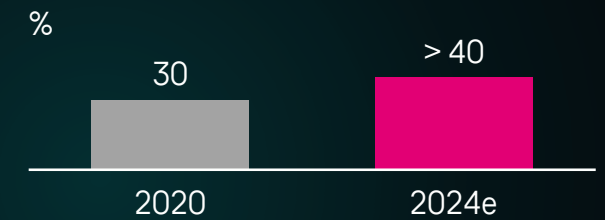
## App penetration



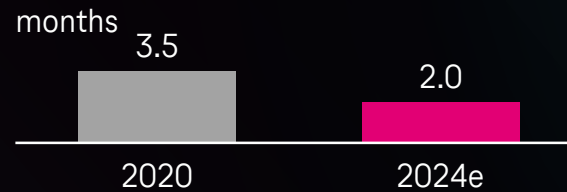
## E-sales share



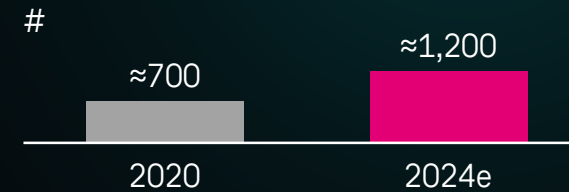
## Share of calls shifted to digital



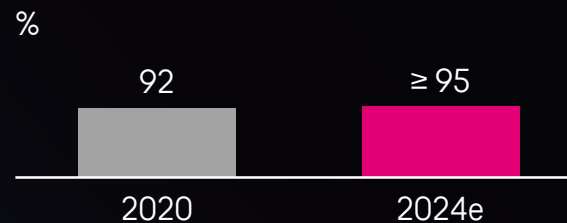
## IT time-to-market



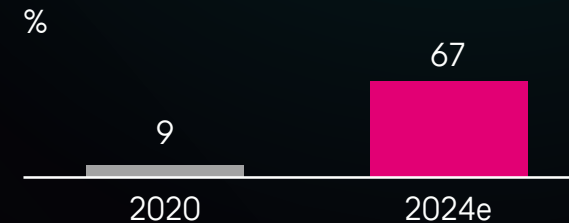
## Releases/month



## First-time right in provisioning



## Cloudified workloads



# Digitalization is at the heart of driving significant cost reductions

## AMBITION 2024e

Substantially cost reduction by digitalization and restructuring

**€0.7 bn** Indirect cost savings<sup>1</sup>



### FULL STACK DIGITALIZATION

New Age-IT, standardized  
and de-coupled  
IT-architecture



### NEW WAYS OF WORKING

Agile delivery and  
reskilling leading to  
leaner organization



### FUTURE OF REAL ESTATE

Optimization of real  
estate



Take out redundancies  
in overhead functions

**50%**

Reduction of office spaces  
by 300k square meters

<sup>1</sup> Germany incl. GHS, 2020–2024e

# We are proud of being a responsible employer and part of society



## OUR PROOF POINTS

- ✓ **We build networks that are inclusive**  
We have connected > 36 mn households with Fiber and kept field service connected to our customers (“keep Germany connected”)
- ✓ **We stand up and offer specials during Covid-19**  
Workplace solutions for SME, content offers for families
- ✓ **We help society when there is need**  
Provided devices for schools, hospitals and nursing homes
- ✓ **We care for our employees**  
We enabled new and flexible working conditions

# We will raise the bar on ESG

Our strategic levers address all aspects of people's lives



DIGITAL

@SCHOOL

Boost digitalization for **schools** with Fiber connectivity, home schooling offers & young data tariffs



REGIONAL

APPROACH

**Network build** focused on maximum participation & inclusion



ENVIRONMENT

100% use of **renewable electricity** since 2020 and sustainable devices and IoT offer

## AMBITION 2024e

≈7,000 Connected schools with FTTH & digital education



Increase in energy efficiency




Continue to drive employee satisfaction


# We have a clear path to accelerate EBITDA growth

2017–2020

CAGR +1.9%

- 
  - **Mobile and fixed growth** by product and network leadership
  - Strong market position drives B2B
  - Discipline in management of indirect costs

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- 
  - Drag from **IP migration**: cost & revenue impact on consumer and business
  - **Line losses in single play**



2020–2024e

CAGR +2.5–3%

- 
  - **B2C growth** driven by focusing on an increasingly converged and loyal base
  - **B2B growth** driven by a digitalizing economy
  - **Indirect cost reduction** driven by digitalization
  - Tailwind from **completed IP migration**

Note: EBITDA = Adj. EBITDA AL

# EBITDA growth and disciplined asset management will ensure ROCE growth > WACC

## Sustainable NOPAT growth

### Revenue Growth ≥ 1%<sup>1</sup>

- Growing demand for broadband
- Digitalization of businesses
- Tailwinds from IP migration

### IDC savings ≈€0.7 bn<sup>2</sup>

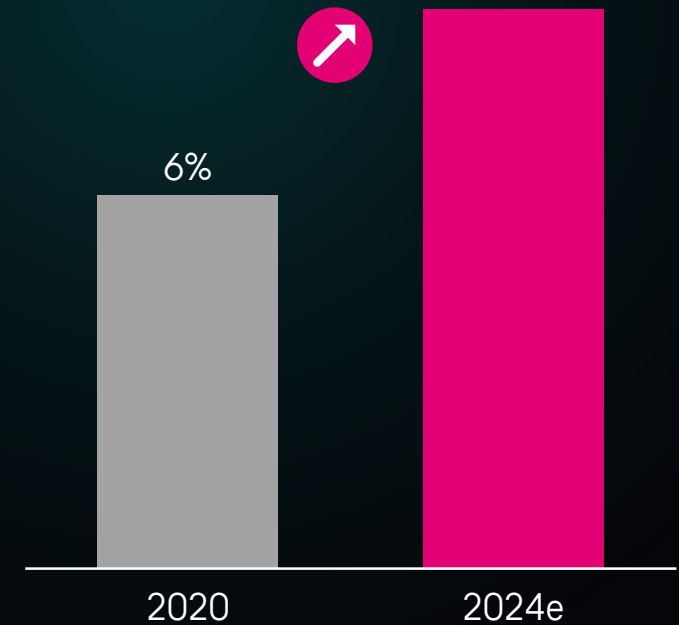
- Efficiencies driven by digitalization
- Changing the way we work
- Overhead reduction

## Disciplined asset management

- Retirement of legacy systems
- Mobile network sharing
- 3G retirement
- Capex efficiencies
- Fiber joint ventures

## AMBITION 2024e

ROCE<sup>2</sup>



Note: EBITDA = Adj. EBITDA AL <sup>1</sup> CAGR 2020–2024e <sup>2</sup> Germany incl. GHS, 2020–2024e

# Midterm ambition level





# Midterm ambition level

	Midterm ambition level	Year
<b>Service revenue</b>	<ul style="list-style-type: none"> <li>▪ Mobile service revenue: CAGR +1–2%<sup>1</sup></li> <li>▪ Broadband revenue: CAGR &gt; 4%</li> <li>▪ Wholesale access revenue: stable</li> <li>▪ Total service revenue: CAGR ≥ 1%</li> </ul>	<ul style="list-style-type: none"> <li>▪ 2020–2024e</li> <li>▪ 2020–2024e</li> <li>▪ 2020–2024e</li> <li>▪ 2020–2024e</li> </ul>
<b>Drivers</b>	<ul style="list-style-type: none"> <li>▪ FTTH homes passed: ≈10 mn</li> <li>▪ 5G coverage: ≈97%</li> <li>▪ Adj. indirect costs AL<sup>2</sup>: Reduction by €0.7 bn</li> </ul>	<ul style="list-style-type: none"> <li>▪ 2024e</li> <li>▪ 2024e</li> <li>▪ 2020–2024e</li> </ul>
<b>Financials</b>	<ul style="list-style-type: none"> <li>▪ Revenue: CAGR ≥ 1%</li> <li>▪ Adj. EBITDA AL: CAGR +2.5–3%</li> <li>▪ Cash Capex: ≈€0.5 bn higher</li> </ul>	<ul style="list-style-type: none"> <li>▪ 2020–2024e</li> <li>▪ 2020–2024e</li> <li>▪ 2020–2024e</li> </ul>

<sup>1</sup> Incl. MTR regulatory effects    <sup>2</sup> Germany incl. GHS

# How we turn customers into fans

