Telefónica Deutschland

Investor presentation

September 2020

Investor Relations

Disclaimer

This document contains statements that constitute forward-looking statements and expectations about Telefónica Deutschland Holding AG (in the following “the Company” or “Telefónica Deutschland”) that reflect the current views and assumptions of Telefónica Deutschland's management with respect to future events, including financial projections and estimates and their underlying assumptions, statements regarding plans, objectives and expectations which may refer, among others, to the intent, belief or current prospects of the customer base, estimates regarding, among others, future growth in the different business lines and the global business, market share, financial results and other aspects of the activity and situation relating to the Company. Forward-looking statements are based on current plans, estimates and projections. The forward-looking statements in this document can be identified, in some instances, by the use of words such as "expects", "anticipates", "intends", "believes", and similar language or the negative thereof or by forward-looking nature of discussions of strategy, plans or intentions. Such forward-looking statements, by their nature, are not guarantees of future performance and are subject to risks and uncertainties, most of which are difficult to predict and generally beyond Telefónica Deutschland's control, and other important factors that could cause actual developments or results to materially differ from those expressed in or implied by the Company's forward-looking statements. These risks and uncertainties include those discussed or identified in fuller disclosure documents filed by Telefónica Deutschland with the relevant Securities Markets Regulators, and in particular, with the German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht – BaFin). The Company offers no assurance that its expectations or targets will be achieved. Analysts and investors, and any other person or entity that may need to take decisions, or prepare or release opinions about the shares / securities issued by the Company, are cautioned not to place undue reliance on those forward-looking statements, which speak only as of the date of this document. Past performance cannot be relied upon as a guide to future performance. Except as required by applicable law, Telefónica Deutschland undertakes no obligation to revise these forward-looking statements to reflect events and circumstances after the date of this presentation, including, without limitation, changes in Telefónica Deutschland’s business or strategy or to reflect the occurrence of unanticipated events. The financial information and opinions contained in this document are unaudited and are subject to change without notice. This document contains summarised information or information that has not been audited. In this sense, this information is subject to, and must be read in conjunction with, all other publicly available information, including if it is necessary, any fuller disclosure document published by Telefónica Deutschland. None of the Company, its subsidiaries or affiliates or by any of its officers, directors, employees, advisors, representatives or agents shall be liable whatsoever for any loss however arising, directly or indirectly, from any use of this document its content or otherwise arising in connection with this document. This document or any of the information contained herein do not constitute, form part of or shall be construed as an offer or invitation to purchase, subscribe, sale or exchange, nor a request for an offer of purchase, subscription, sale or exchange of shares / securities of the Company, or any advice or recommendation with respect to such shares / securities. This document or a part of it shall not form the basis of or relied upon in connection with any contract or commitment whatsoever. These written materials are especially not an offer of securities for sale or a solicitation of an offer to purchase securities in the United States, Canada, Australia, South Africa and Japan. Securities may not be offered or sold in the United States absent registration under the US Securities Act of 1933, as amended, or an exemption there from. No money, securities or other consideration from any person inside the United States is being solicited and, if sent in response to the information contained in these written materials, will not be accepted.

The Telefónica Deutschland Equity Story: Why should you invest?

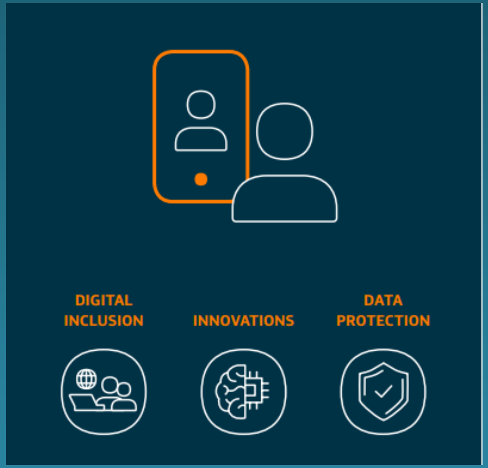
Germany An attractive and dynamic telecoms market	**An established player** Leveraging economies of scale	**Operational excellence** Digital transformation drives growth	**Value proposition** Attractive shareholder return on strong fundamentals
Excellent macro Rational market Data growth Soft convergent environment 3 integrated players	Largest owned customer base Multi-brand Multi-channel Customer-centric convergence play Fixed-mobile-substitution	All-infrastructure set-up Successful integration track record Transformation with Digital4Growth: SIMPLER FASTER BETTER	Clear growth path Strong FCF trajectory High pay-out ratio to FCF aL Conservative financial profile

We steer our sustainability commitments with our Responsible Business Plan 2020

Managing responsibly

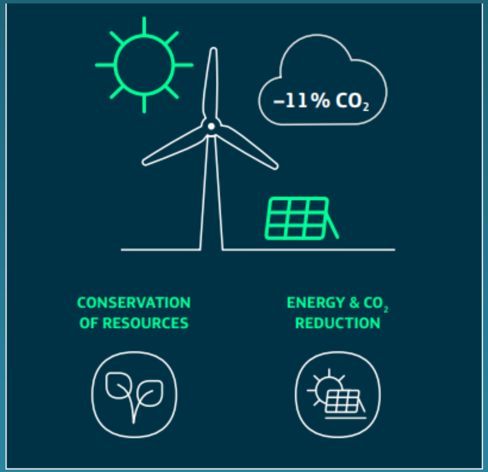
Consistently good to very good results and ratings by external assessments

Strengthening digital life



People are benefitting from our products in their digital lifestyle

Protecting environment



Ambition to reduce direct & indirect CO_2 emissions by -11% vs 2017

Telefónica Deutschland’s way forward

1 1998 - 2008

BUILD

- Business set-up
- Introduction of O_2 brand
- Start of 4th network

2 2009 - 2019

SCALE

- Acquisition & integration of HanseNet & E-Plus
- Consumer mobile leadership
- Established fixed player

3 2020 and beyond

GROW

- Mobile growth in rural & reinforcement in urban
- Smart bundling
- B2B push

Market entrance

Integration

Benefits from scale & transformation

Reiterating key priorities of strategic plan for the ‘new 20s’

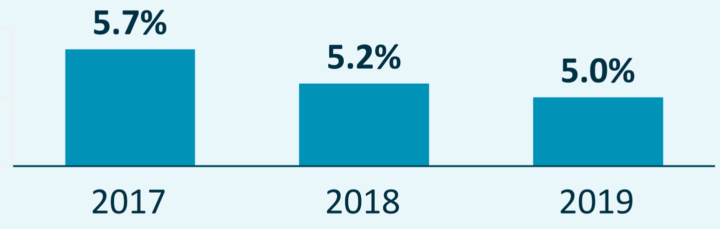
- Accelerating growth trajectory
- Boost rural coverage, accelerate urban capacity
- Smart bundling to improve loyalty
- Technology-agnostic internet solutions;
  FMS to improve profitability
- Leverage B2B strategy to gain fair market share in SME

Commitment to deliver attractive shareholder remuneration

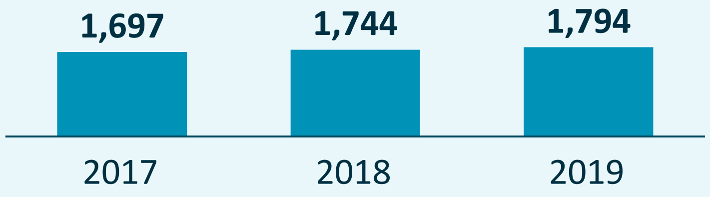
Germany a safe harbour;
5G and exclusive cable access as game changers for Telefónica Deutschland

Stable macro-environment

Unemployment rate[1]



Consumer spend[2]
in EUR bn



Current trends

Dynamic yet rational mobile market

Data growth continued CAGR of >50%

Soft convergent market environment

3 strong mobile networks

Future trends

5G use cases & demand to accelerate

Fixed-Mobile-Substitution (FMS) becoming increasingly **relevant**

Potential 4th urban MNO

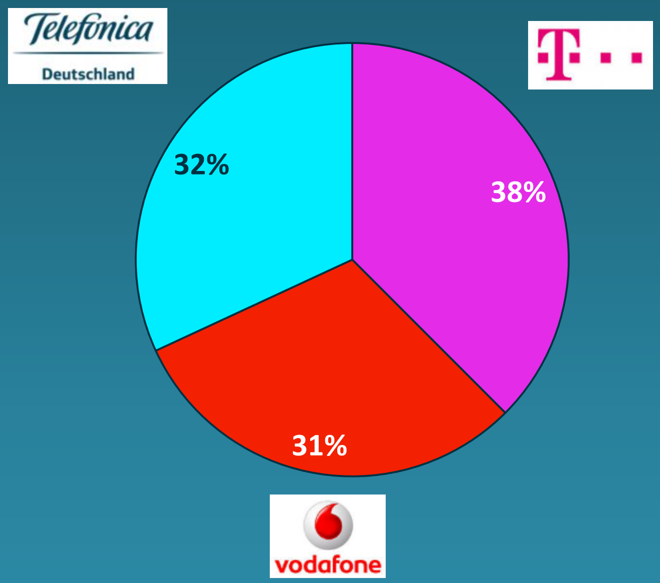
3 integrated (mobile + fixed) players

[1] Source: Federal Employment Agency
[2] Source: Destatis

Telefónica Deutschland

Competitive environment

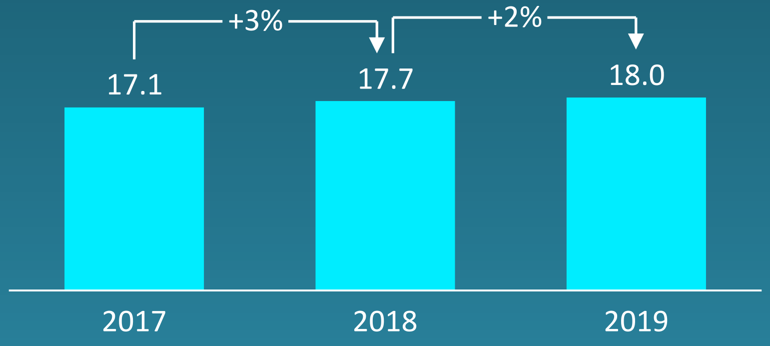
Rational and balanced market structure[1]



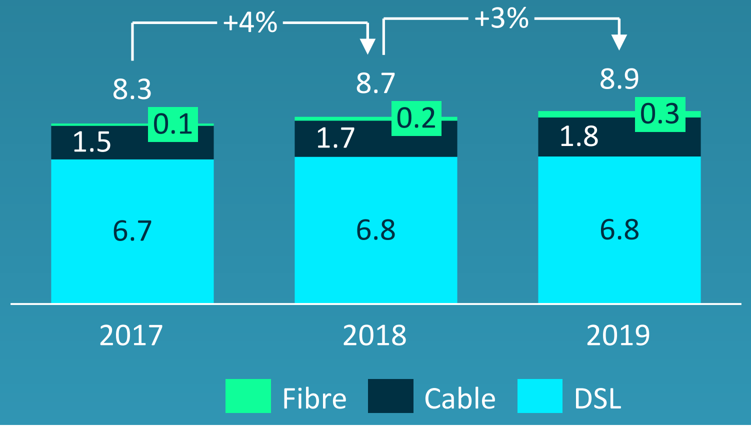
- Rational market following 4 to 3 consolidation
- Tiered mobile data portfolios enabling data monetisation

Market development in past years[2]

Mobile market: Service revenues
EUR bn



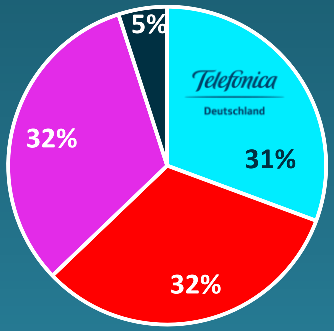
Fixed broadband retail revenues
EUR bn



[1] Market share of MSR (IFRS 15) based on reported financials by MNOs for Q2 2020
[2] Source: Analysys Mason "Western Europe telecoms market trends and forecasts 2019–2024", 28.02.2020

The right time to invest to accelerate future growth for Telefónica Deutschland

Competitive spectrum position



>300MHz

Largest infrastructure footprint with exclusive cable wholesale access

>90% with German households

>30 Mbit/s

DSL

fibre

cable

Telefónica

Deutschland

3x 'GOOD' in all network tests

connect GUT MOBILFUNK-NETZTEST O2 Heft 1/2020

CHIP gut Test: Mobilfunknetze CHIP 01/2020 O2 Unabhängige Tests seit 1978 chip.de/Netztest

Computer Bild DAS BESTE NETZ FÜR 2020 GUT

Significantly improved network performance for ~44m mobile accesses

Customer experience

WINNER	WINNER	VERY GOOD	VERY GOOD	VERY GOOD	4.5/5
Stores	Partner-Stores	Fixed Net	Fixed Net	Service App	O_2 TV
National store operators	Franchise operators	Fixed Net big players	Fixed Net offers	Telcos	Computer Bild User Test

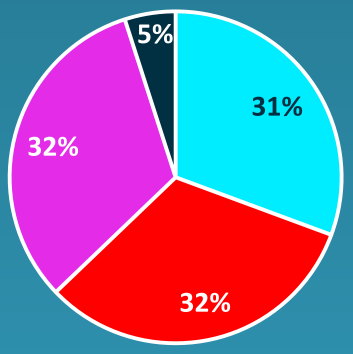
Premium customer service & access to all sales channels

Future-proof spectrum set-up to enable best customer experience

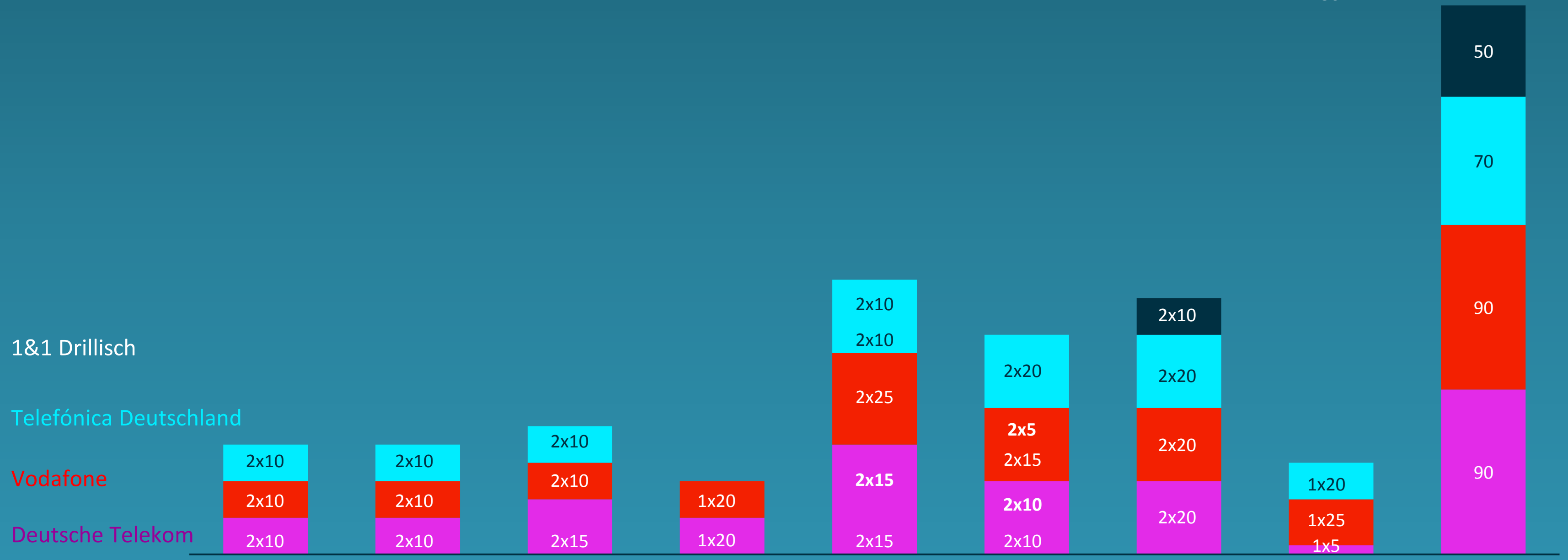
Balanced position in coverage and capacity spectrum until 2025

Frequencies	700 Mhz	800 MHz	900 MHz	1500 MHz SDL	1,800 MHz	2,100 MHz[1]	2,600 MHz	2,600 MHz TDD	3,500 MHz TDD
Potential future utilisation	5G 4G	5G 4G	4G 2G	5G 4G	5G 4G	5G 4G	5G 4G	5G 4G	5G
Utilisation today	4G	4G	2G/4G		2G/4G	3G/4G	4G	pLTE	
Total availability	2x 30 MHz	2x 30 MHz	2x 35 MHz	1x 40 MHz	2x 75 MHz	2x 60 MHz	2x 70 MHz	1x 50 MHz	1x 300 MHz
Maturity	2019-2033	2010-2025	2017-2033	2015-2033	**2010-2025** 2017-2033	**2010-2025** 2021-2040	2010-2025	2010-2025	2019-2040

Total Spectrum holding



TEF VF DT DRI

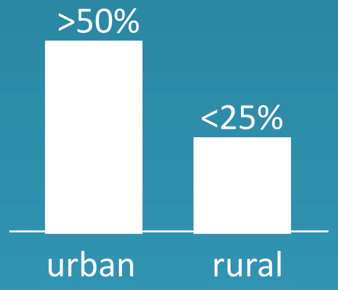


[1] In addition: 24.2 MHz @2.1 GHz TDD, ab 2021 19.2 mHZ
As of 1 January 2026: DRI: 2x10 MHZ; TEF D: 2x10 MHz; Vod: 2x20 MHz; DT: 2x20 MHz

Telefónica Deutschland

The expansion of our mobile network allows Telefónica Deutschland to accelerate our growth trajectory

Opportunity: Mobile customer distribution



Step change in network quality from accelerated 4G/5G roll-out

Boost rural coverage via 4G

Accelerate urban capacity via 5G

Boost revenues to outperform market

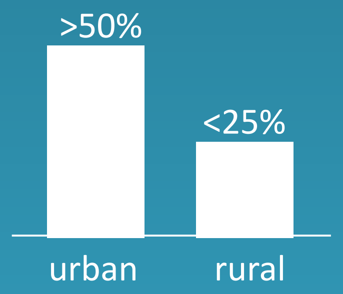
Mobile growth in rural – reinforcement in urban

Smart bundling to capture value and reduce churn

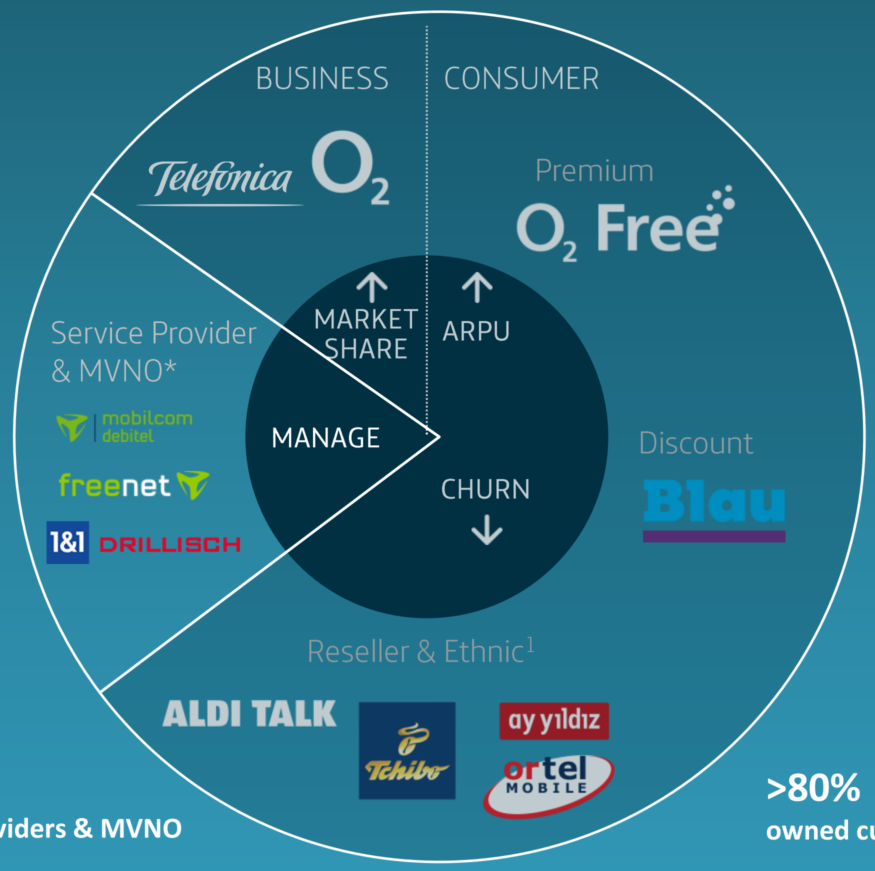
Attack in B2B to reach fair market share in SME

Revenue growth driven by a step-up in 4G network quality and 5G boost

Mobile customer share



Sustained focus on owned customer base



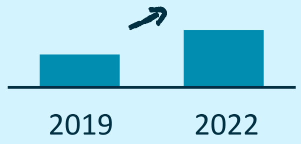
~20%
service providers & MVNO

>80%
owned customers

MSR

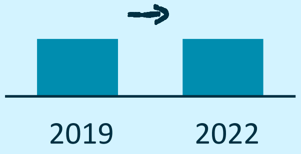
Rural market share

Fair share

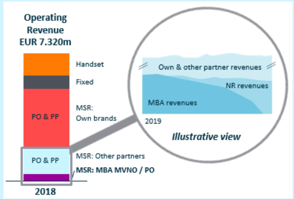


Urban market share

Maintain share



Gradual transition of wholesale revenue streams



[1] Not exhaustive

All-infrastructure play as unique positioning

MOBILE INFRASTRUCTURE

Fixed-Mobile-Substitution (FMS) ✓

FIXED NET INFRASTRUCTURE

FttX incl. VDSL ✓

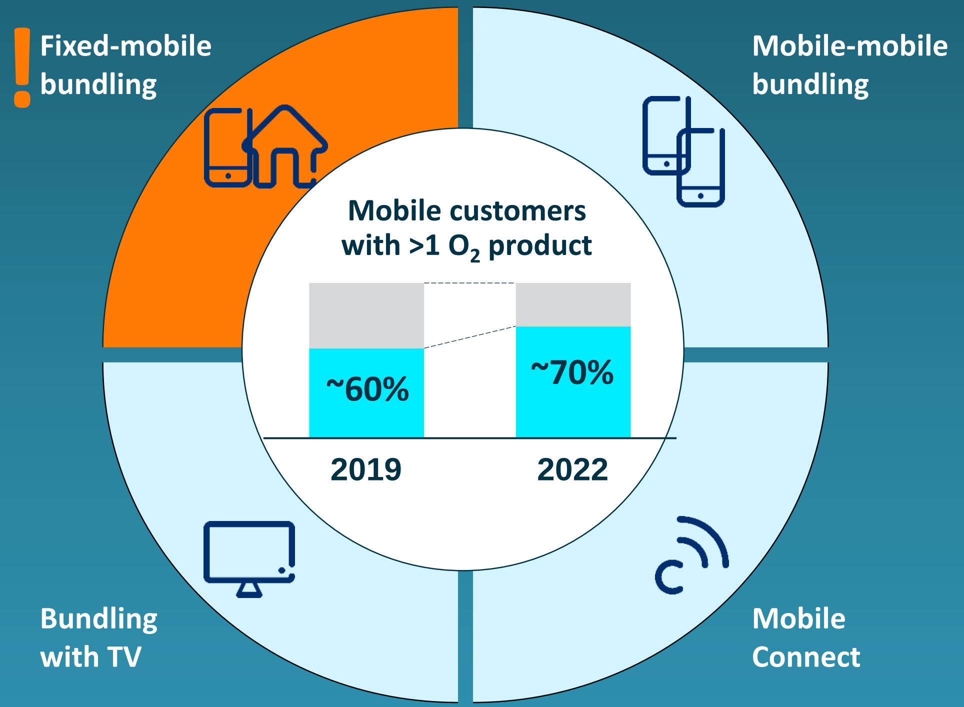
Cable ✓

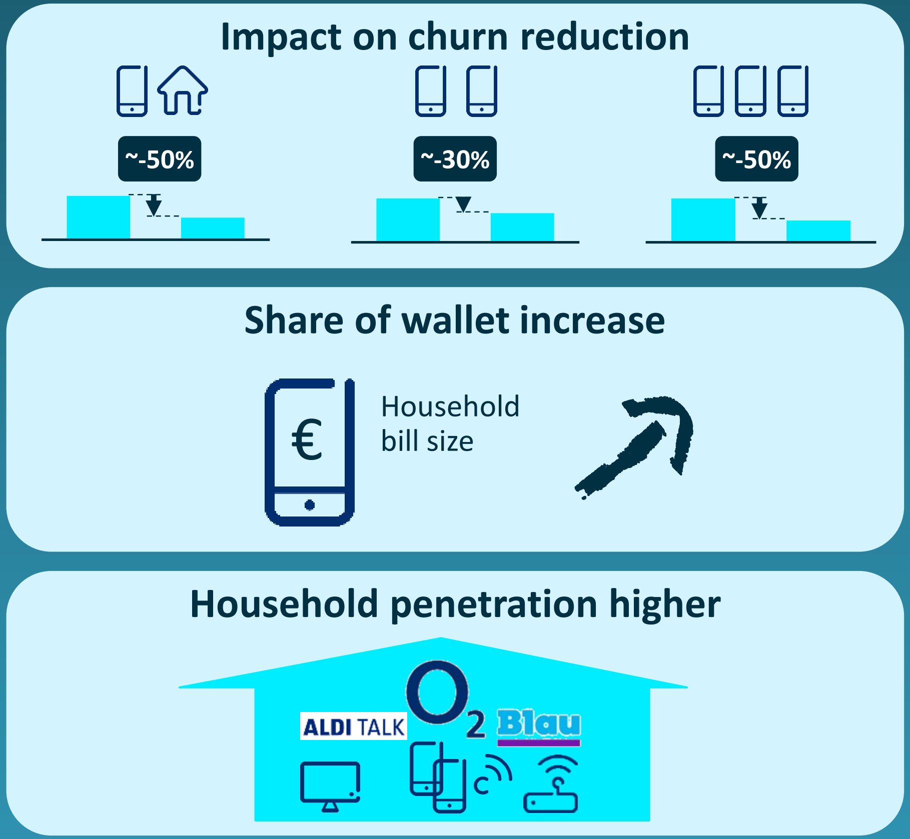
Smart bundling to capture value and reduce churn

Technology-agnostic Internet@Home solutions with focus on customer experience

Fixed-mobile-substitution increases profitability

Improve loyalty and convergence positioning by pushing smart bundling approach





B2B strategy drives growth by positioning Telefónica Deutschland as price/value leader for SMEs

B2B revenue & market share

2019 / 2020			2021
PULL		PUSH	
Go-to-Market strategy	**Personalised customer service**	**Improved sales approach**	**Portfolio for digitalisation**
Price/value leader for SME	Unique service proposition with dedicated contact	Push via Tele-sales	IoT, cloud, cyber security, private 5G network

Driving intact business dynamics despite COVID-19

H1 20

GROWTH & PROFITABILITY

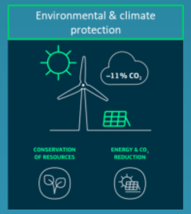
+2.0% +3.8%[1]	-1.9% +2.4%[1,2]	13.1%
REVENUE y-o-y	OIBDA[2] y-o-y	CAPEX/SALES

CUSTOMER EXPERIENCE & DIGITALISATION

+347k	14.3%	Stable
Postpaid net adds (ex 116k M2M)	Own brand annualised churn rate at historic low	Own brand postpaid ARPU (ex roaming) y-o-y

FOUNDATION

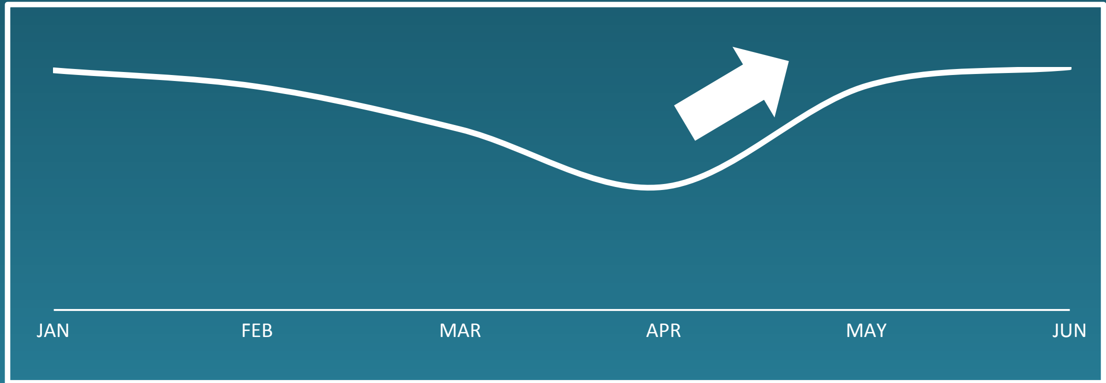
- Resilient network coping well with COVID-19 driven traffic increase
- Steady progress with LTE rollout – on track to achieve FY20 coverage target
- ESG – accelerated ambition to be 'climate neutral' latest by 2030



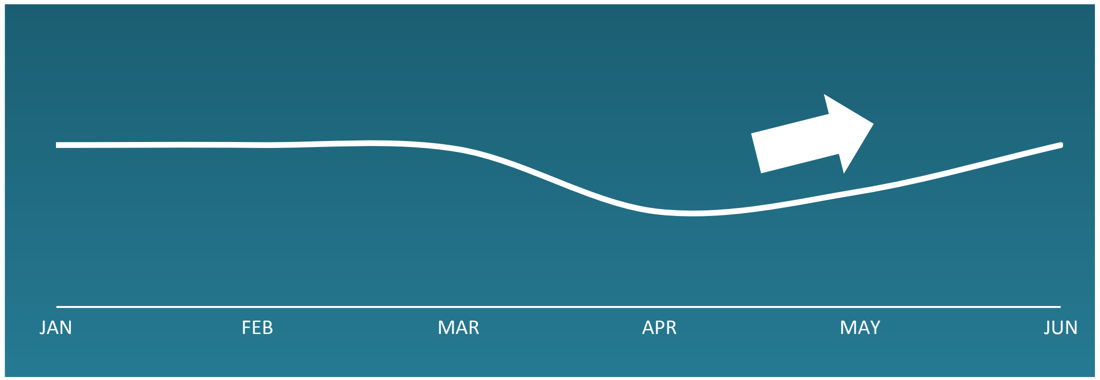
[1] Excl. combined COVID-19 impacts and other non-recurrent special factors.
[2] Adjusted for exceptional effects.

Seeing encouraging signs of operational recovery with phased easing of COVID-19 restrictions

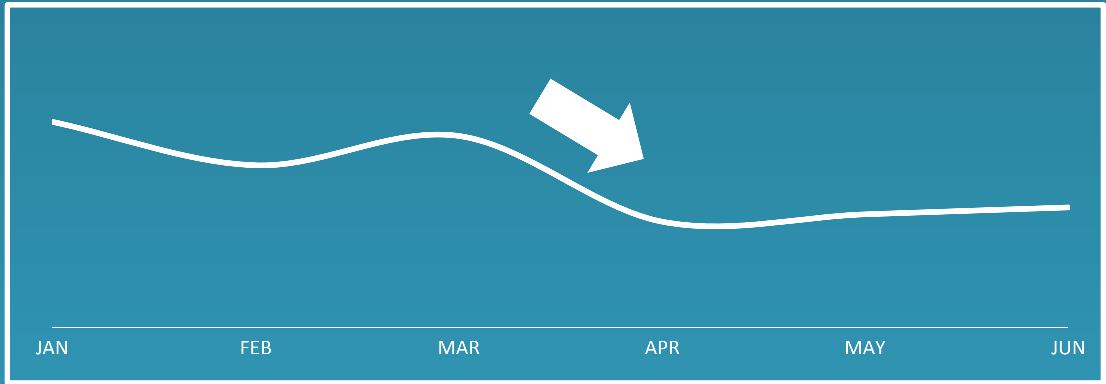
O_2 gross adds – recovery to pre COVID-19 level



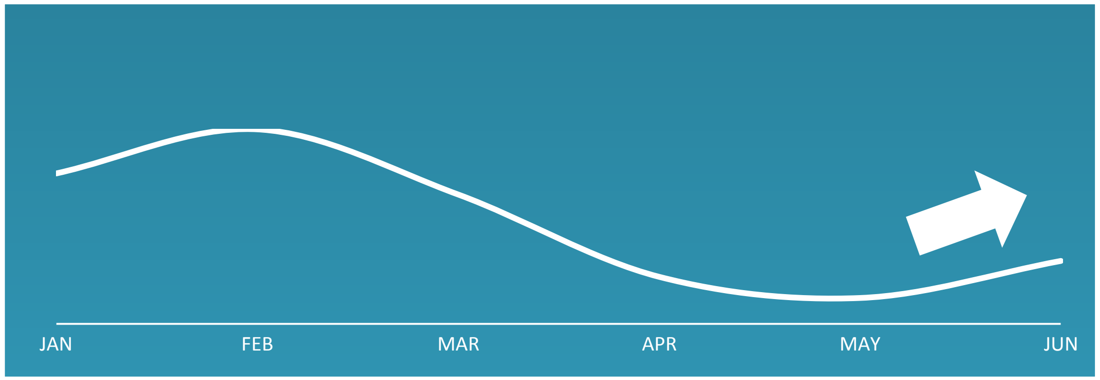
Prepaid top up bookings – fully recovered



O_2 churners – reduced to lower levels



Roaming revenue – initial signs of gradual recovery



Resilient network – foundation for future growth

Network roll-out strategy

2020 | 2021 | 2022

Boost rural coverage

4G coverage 50 Mbit/s

99%

4G/5G coverage 100 Mbit/s

98%

Accelerate urban capacity

4G capacity

Re-farm 2.1 GHz to 4G

5G roll-out in cities

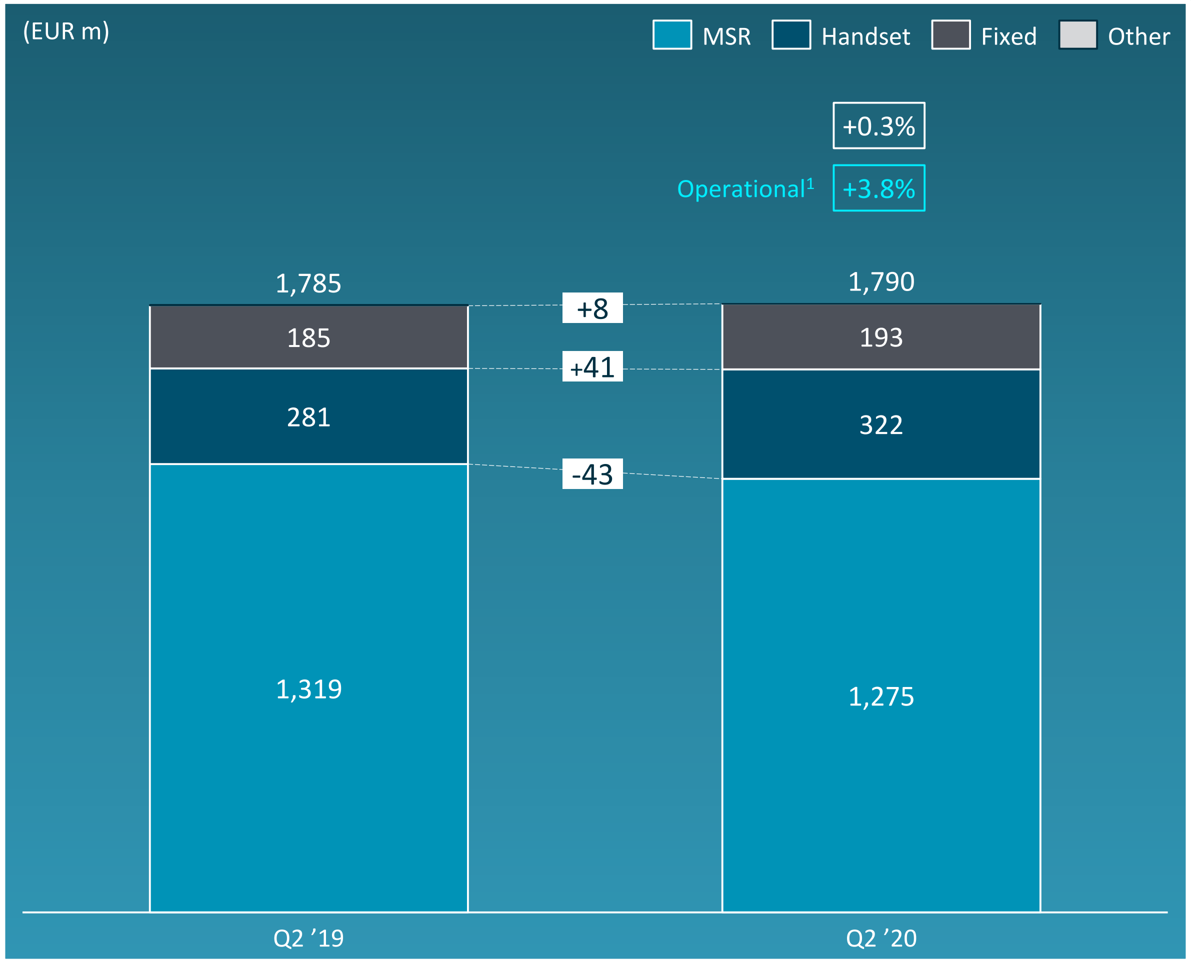
Top 5 cities | **Top 30** cities

Steady progess with network roll-out strategy

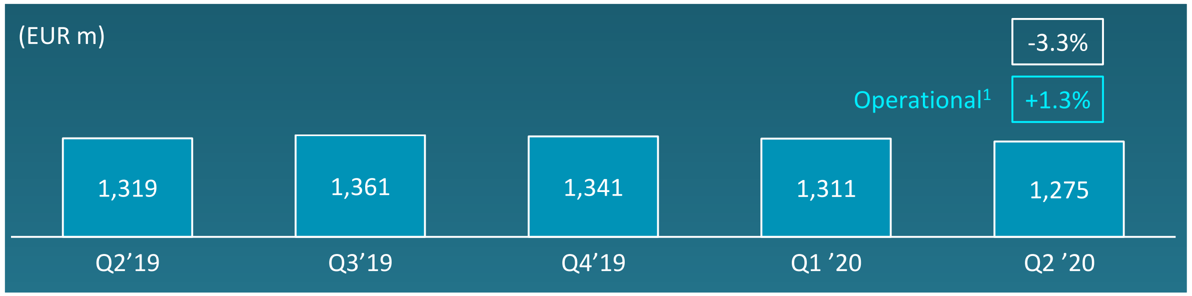
- **On track to achieve FY20 coverage target of 7.6k LTE sites**
  - >90% pop coverage
  - 100% household coverage in Berlin, Hamburg, Bremen
  - 97% household coverage in NRW
  - 40% of FY20 LTE target achieved
- **Ericson to build 5G core network**
- **Ramp up of 5G rollout into top 5 German cities**

Revenue – operational trends intact

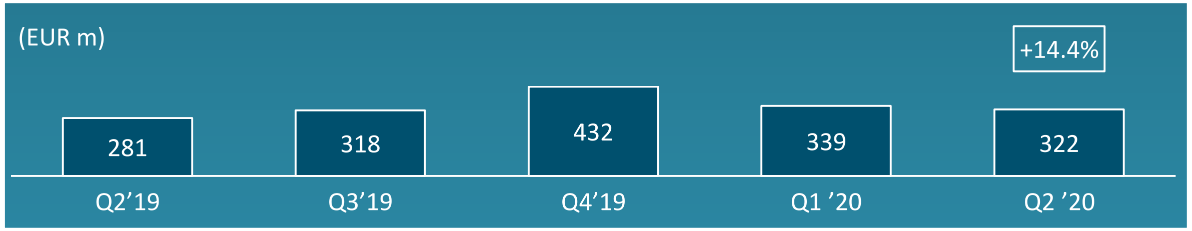
Revenue slightly up despite reduced roaming contribution



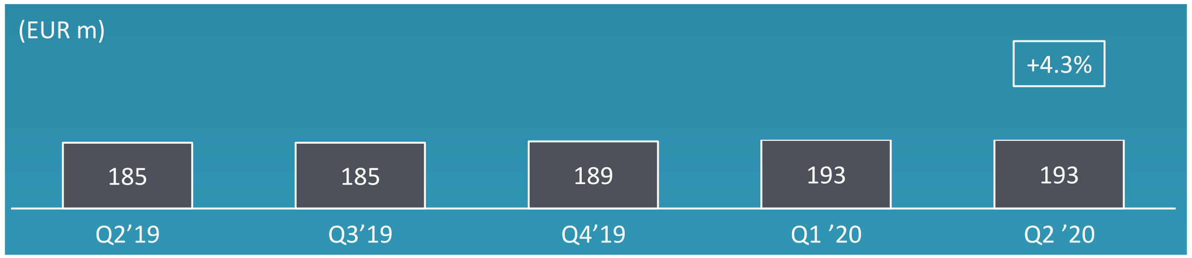
Operational MSR trend intact despite tougher comps



Continued demand for high-value devices



Fixed revenue growth driven by improved customer mix

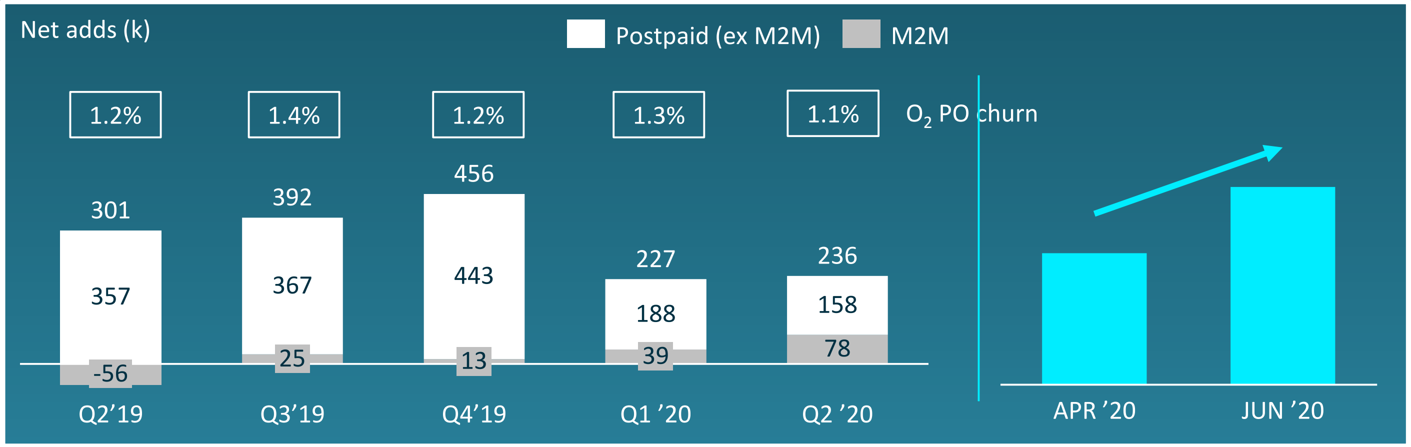


[1] Excl. combined COVID-19 impacts and other non-recurrent special factors

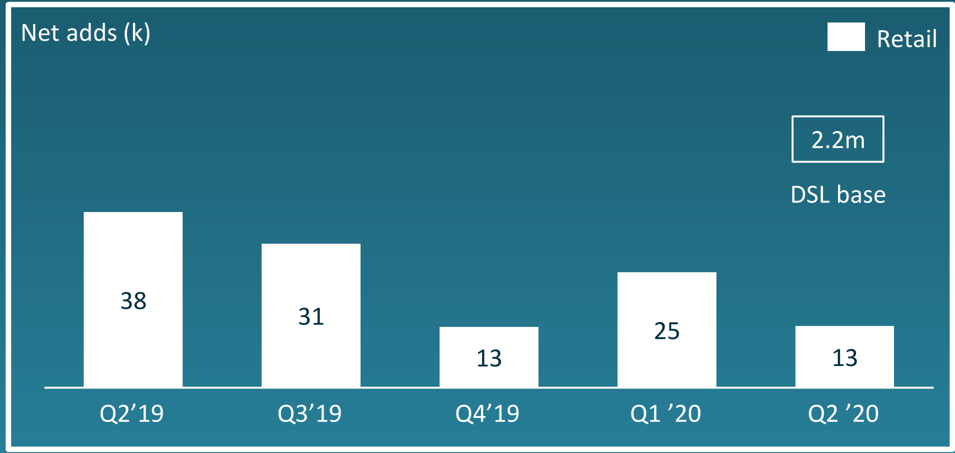
Telefonica Deutschland

Gradual trading recovery & early signs of ARPU rebound post lockdown

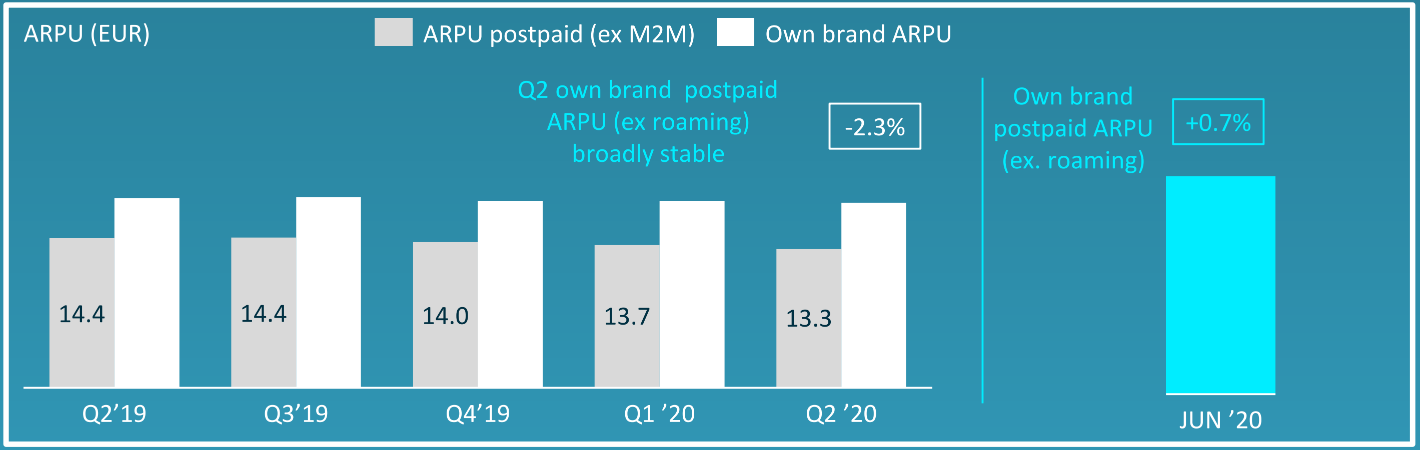
Focus in mobile on profitable growth



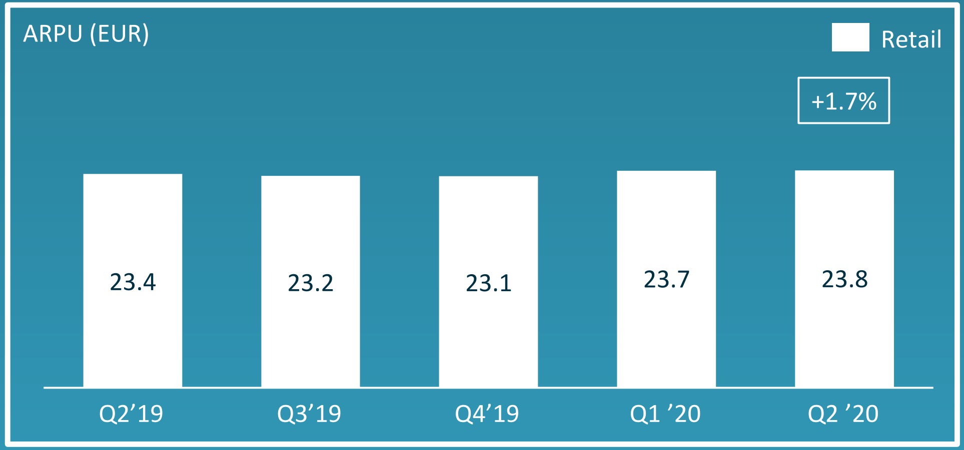
Sustained demand for VDSL drives growth



O_2 Free partly offsets reduced roaming contribution to ARPU



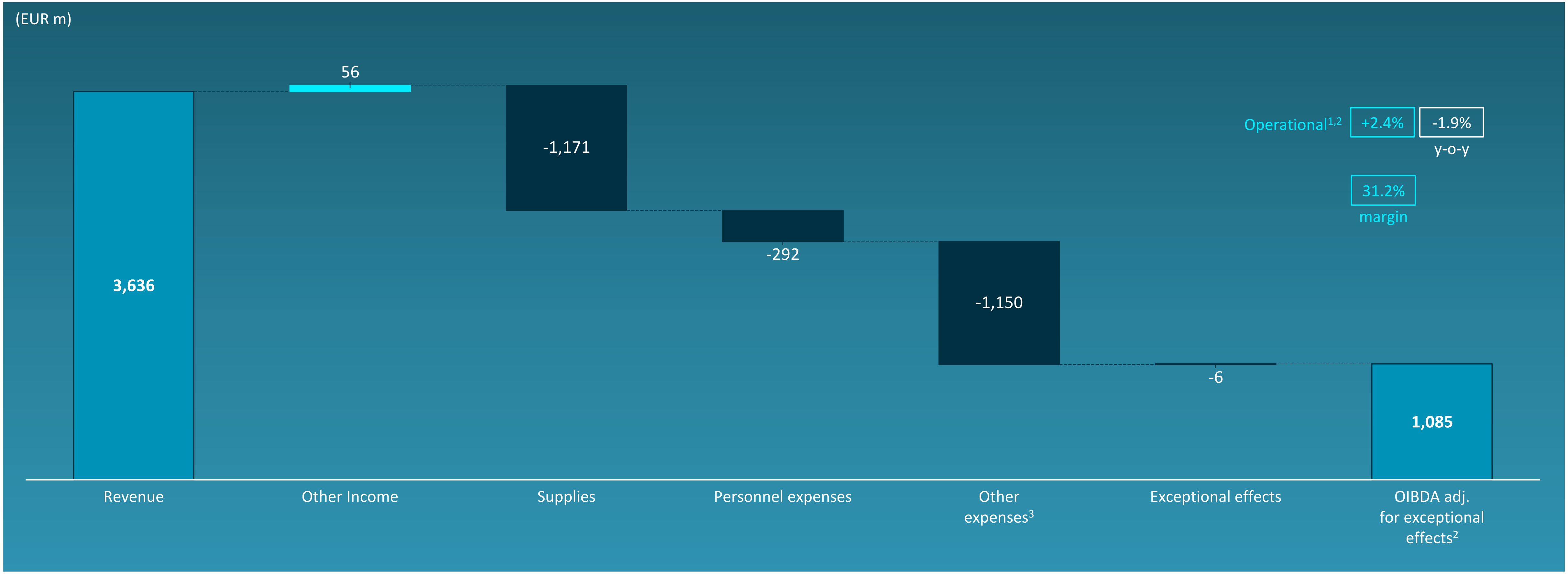
Fixed ARPU reflects higher VDSL share



Telefonica
Deutschland

Operational OIBDA[1,2] continues to grow in H1 20

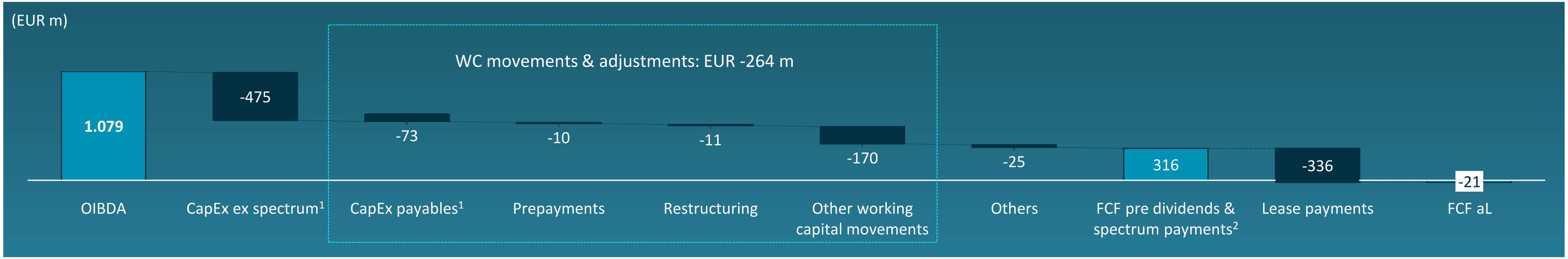
H1 20 revenue impacted by special factors with flow-through to OIBDA



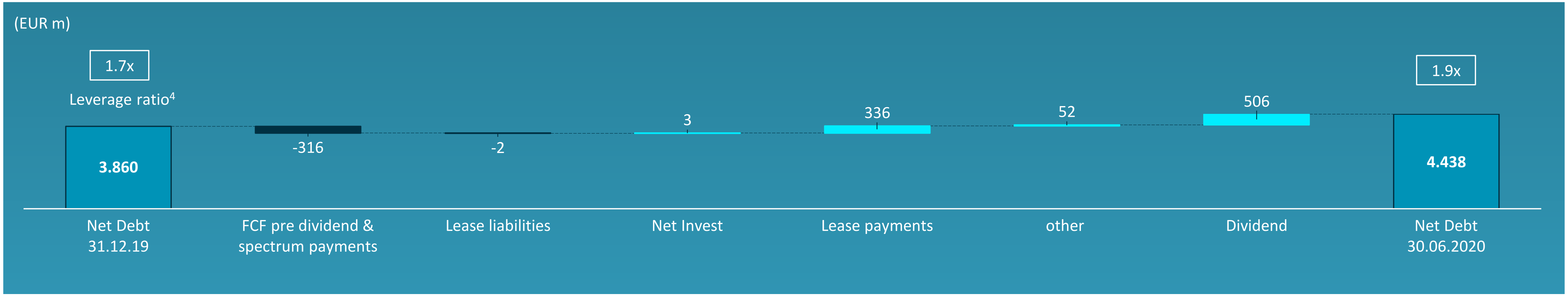
[1] Excl. combined COVID-19 impacts and other non-recurrent special factors
[2] Adjusted for exceptional effects
[3] Includes exceptional effects, Group fees and impairment losses in accordance with IFRS 9

Free Cash Flow dynamics reflect usual seasonal movements

Evolution of H1 20 FCF



Net debt[3] – leverage well in-line with target

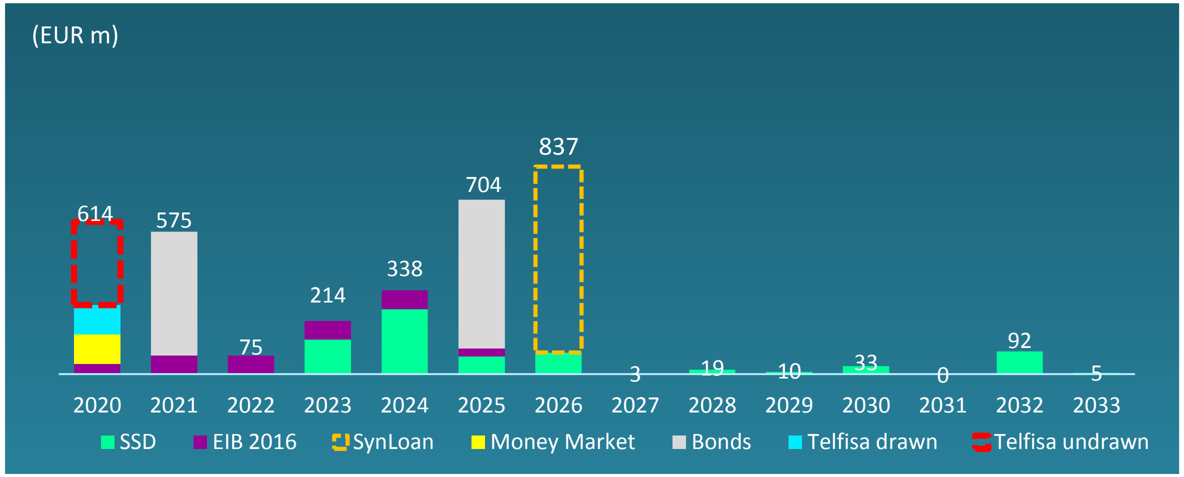


Telefónica Deutschland

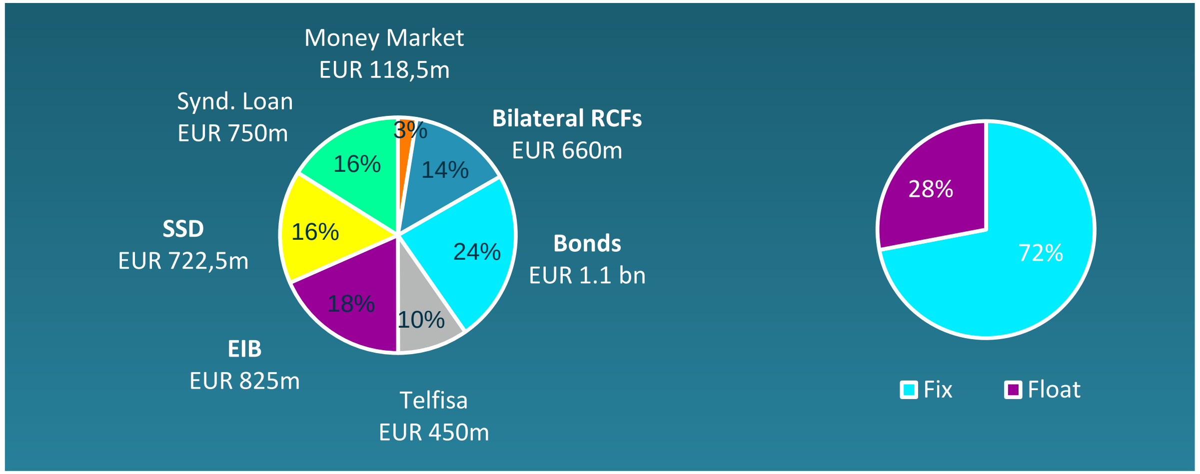
[1] Excluding additions from capitalised right-of-use assets and investments in spectrum
[2] FCF pre dividends & spectrum payments is defined as the sum of cash flow from operating activities & cash flow from investing activities
[3] Net financial debt includes current and non-current interest-bearing financial assets and interest-bearing liabilities as well as cash and cash equivalents and excludes payables for spectrum
[4] Leverage ratio is defined as net financial debt divided by the OIBDA for the last twelve months adjusted for exceptional effects

Strong liquidity position - smooth debt maturity profile and well diversified financing mix

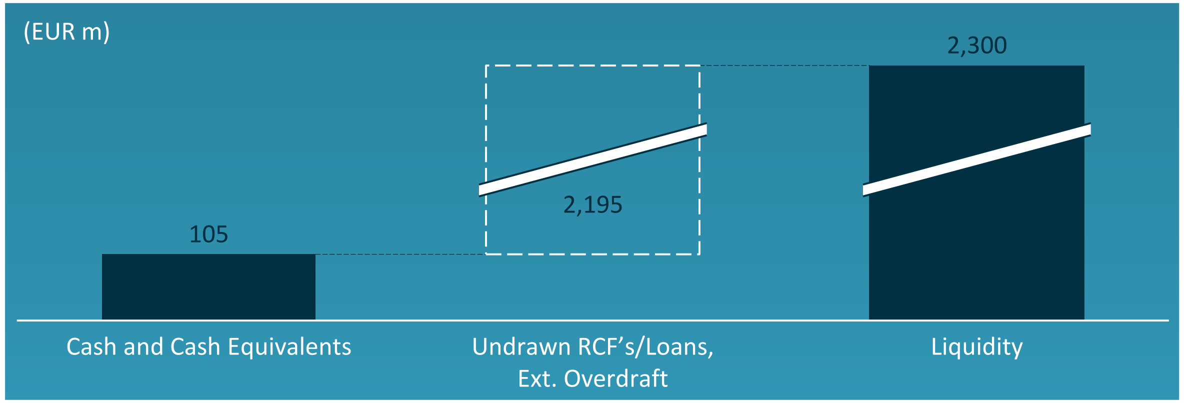
Maturity profile[1]



Financing and interest mix[2]



Liquidity position



Comments

- Ample liquidity of c. EUR 2.3bn provides significant financial stamina. This includes a EUR450m undrawn EIB Loan
- Well balanced and diversified maturity profile
- Low exposure to changes in interest rates due to a high percentage of debt at fixed rates
- EUR 118.5m Money Market Facilities outstanding

[1] Maturity profile excludes bilateral facilities and undrawn EIB loan of EUR 450m
[2] Interest mix excludes undrawn facilities

Strong confidence in mid-term FCF generation ability and remain committed to attractive shareholder remuneration

FCF

- **Temporary investment programme** to drive future growth & profitability
- **Strong confidence in mid-term FCF generation ability**
- **No material cash tax** during investment period; minimum taxation of 12-13% thereafter (due to tax losses carried forward of EUR 14.7 billion for corporate income tax and EUR 14.3 billion for trade tax)

Leverage[1]

- Maintaining **Fitch BBB investment grade rating**
- **Strong B/S with low indebtedness;** leverage a 1.9x (IFRS 16) as of 30.06.2020
- **IFRS 16 leverage target: At or below 2.5x; solid headroom under current rating**
- Deferred spectrum payments lead to increased **financial flexibility**

Dividend policy

- **Continuity since the IPO**
- **High pay-out ratio to FCF aL**
- **Dividend of EUR 0.17/share, which will be a floor during our investment programme in 2020/21**

[1] Leverage ratio is defined as net financial debt divided by the OIBDA for the last twelve months adjusted for exceptional effects

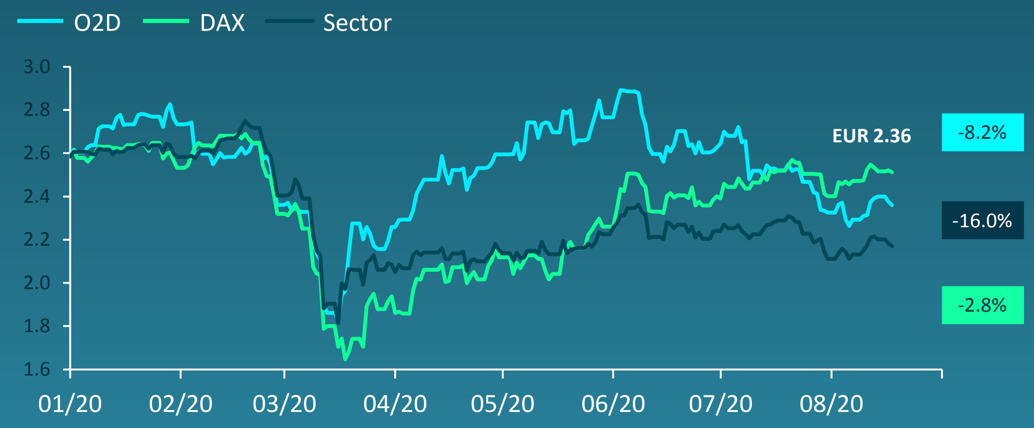
Confirming FY20 revenue & OIBDA outlook while anticipating C/S below 17-18%; continuously monitoring COVID-19 developments

	Outlook FY20	Mid-term guidance 2020/22	H1 20
Revenue	**Flat to slightly positive** (incl. reg. impacts of ~EUR 20-30m)	TEF D with cumulated growth of min. 5%	H1'19: 3,564; H1'20: 3,636; +2.0%; **+3.8%[1]**
OIBDA[2]	**Broadly stable to slightly positive** (incl. reg. impacts of less than ~EUR 10m)	Ongoing margin improvement	H1'19: 1,106; H1'20: 1,085; -1.9%; **+2.4%[1,2]**
C/S	**< 17-18%**	2-year investment programme to generate growth with C/S (incl. 5G RAN) of < 17-18% in 2020, peaking b/w 17-18% in 2021 & normalising in 2022	H1'19: 496 (13.9%); H1'20: 475 (13.1%)

[1] Excl. combined COVID-19 impacts and other non-recurrent special factors.
[2] Adjusted for exceptional effects.

O2D factsheet

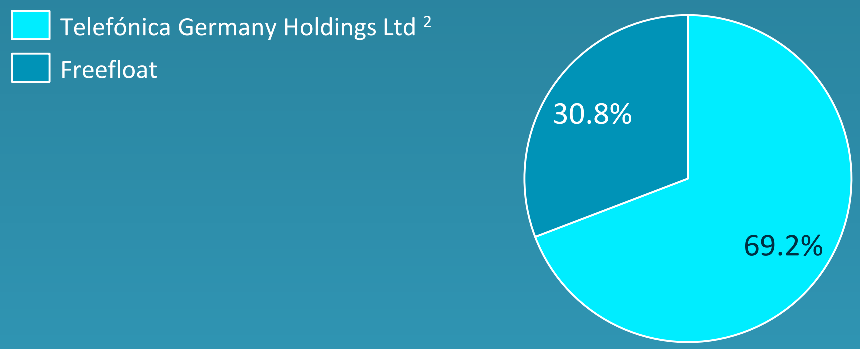
Share price development as of 18 August 2020



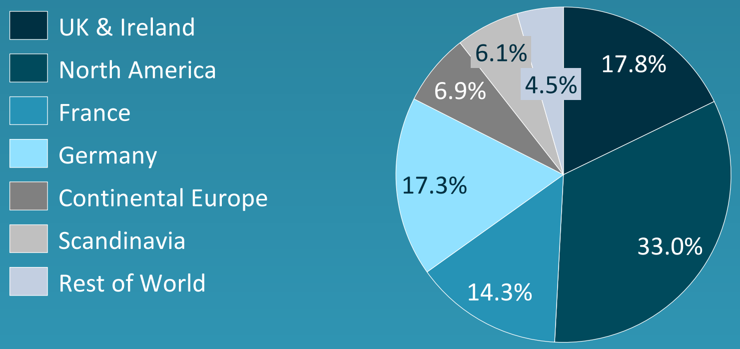
Telefónica Deutschland at a glance[1]

Market segment	Prime Standard
Industry	Telecommunications
Shares outstanding	2,974,554,993 shares
Share capital	EUR 2,974.6 m
Market cap	EUR 8,156.2 m
Share price	EUR 2.742

Shareholder structure[1]



Regional split of shareholder structure[3]



[1] Status: 30 June 2020
[2] Telefónica Germany Holdings Limited is an indirect wholly owned subsidiary of Telefónica S.A.
[3] Source: NASDAQ; Shareholder ID as of March 2020

Any further questions? Please reach out to us!

Christian Kern
Director Investor Relations

+44 7517 999 208
christian.kern@telefonica.com

Marion Polzer, CIRO
Head of Investor Relations

+49 176 7290 1221
marion.polzer@telefonica.com

Eugen Albrecht
Senior Investor Relations Officer

+49 176 3147 5260
eugen.albrecht@telefonica.com

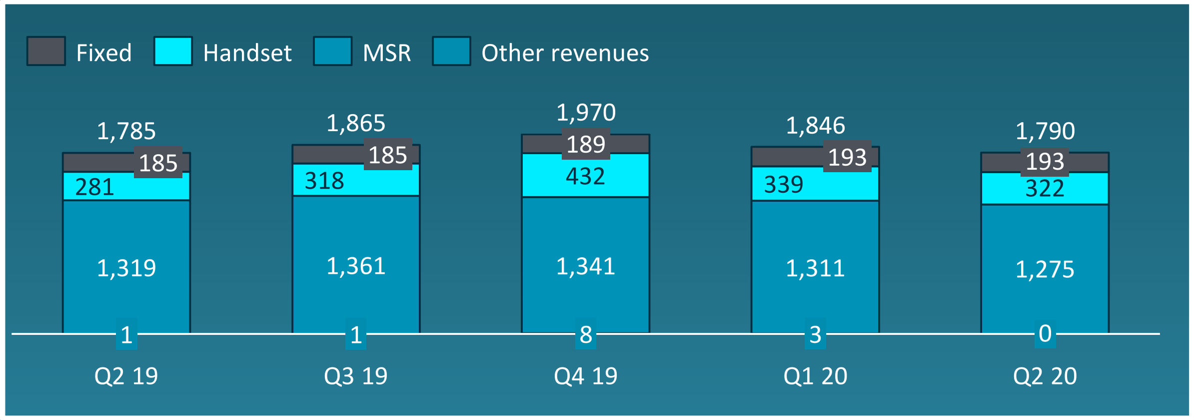
+49 89 2442 1010

IR-Deutschland@telefonica.com

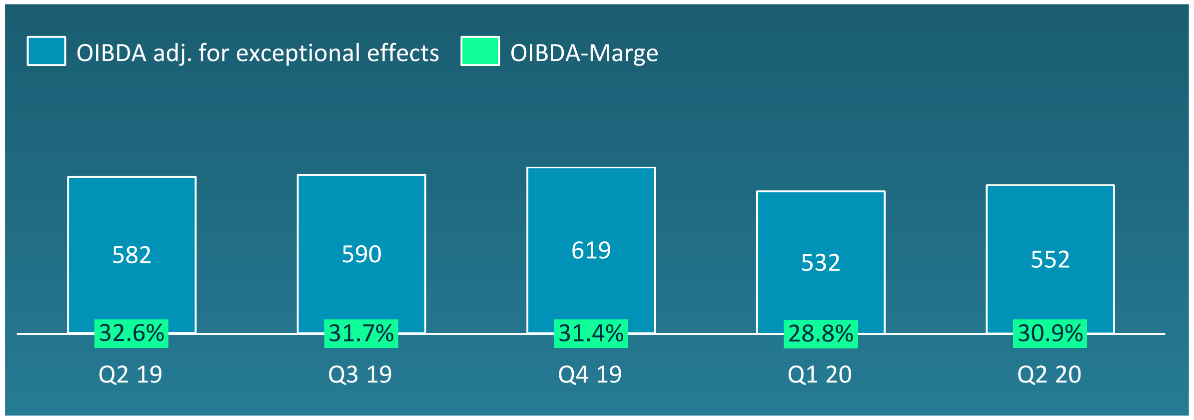
Appendix

P&L

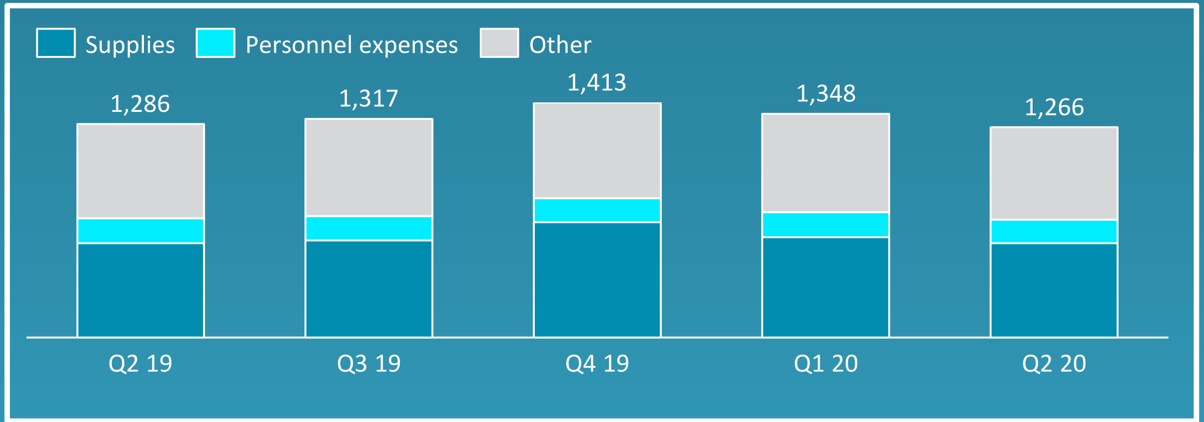
Revenue structure (EUR m)



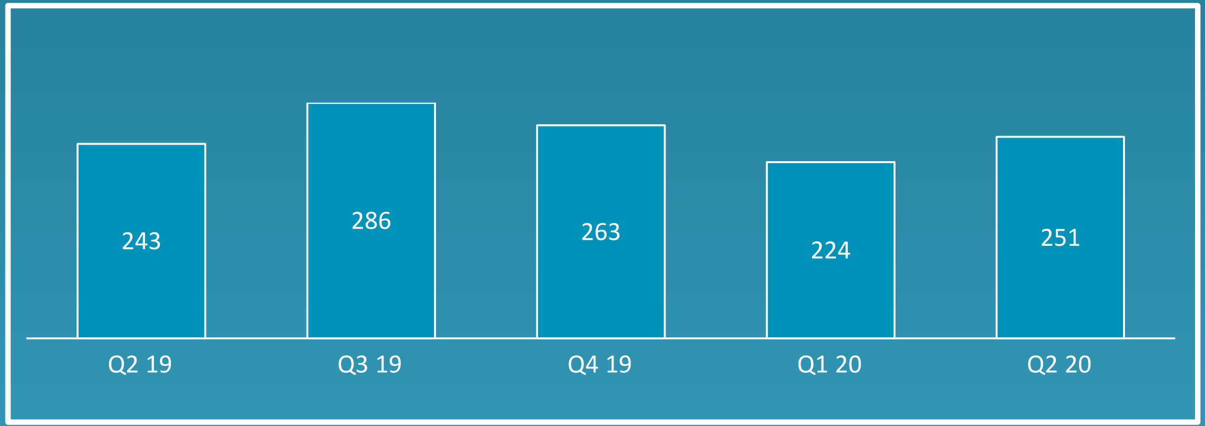
Underlying OIBDA[1] (EUR m)



OpEx split[2] (EUR m)



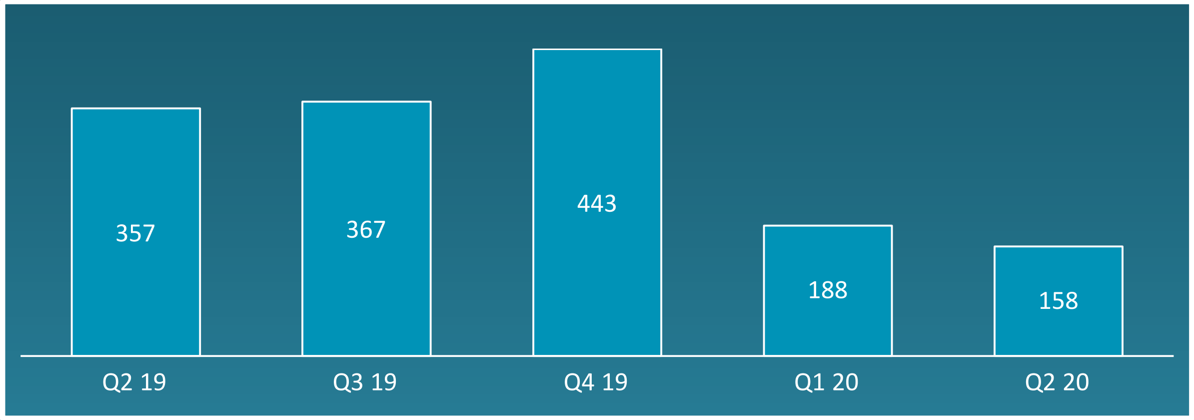
CapEx[3] (EUR m)



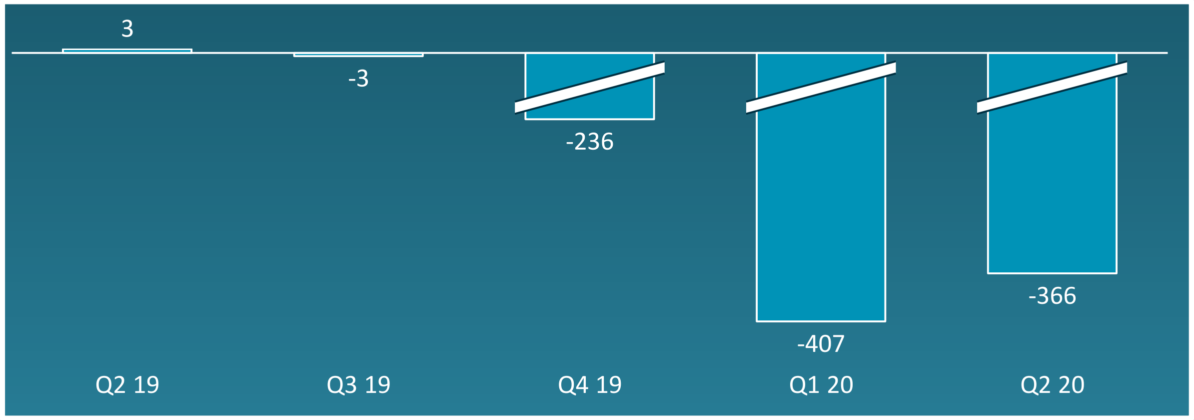
[1] Adjusted for exceptional effects
[2] Includes impairment losses in accordance with IFRS 9
[3] Excluding additions from capitalised right-of-use assets

Mobile KPIs

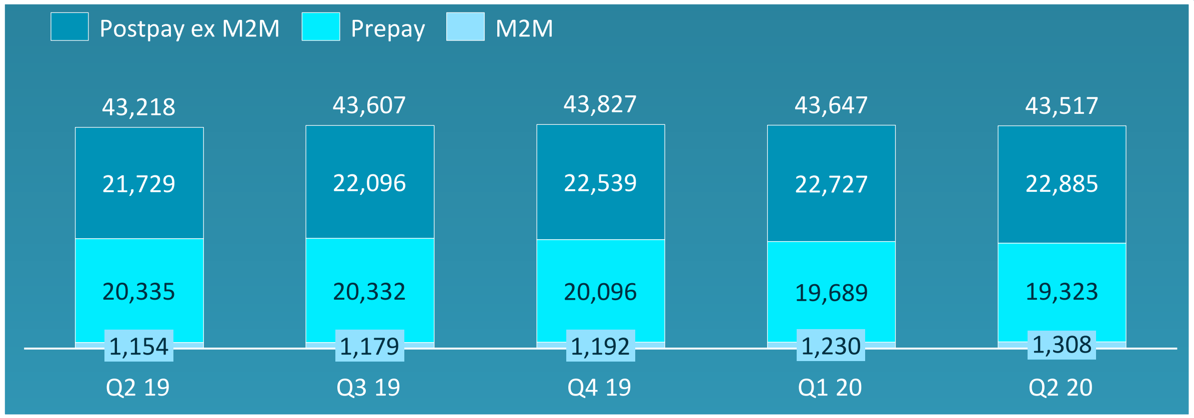
Postpay net adds[1] (k)



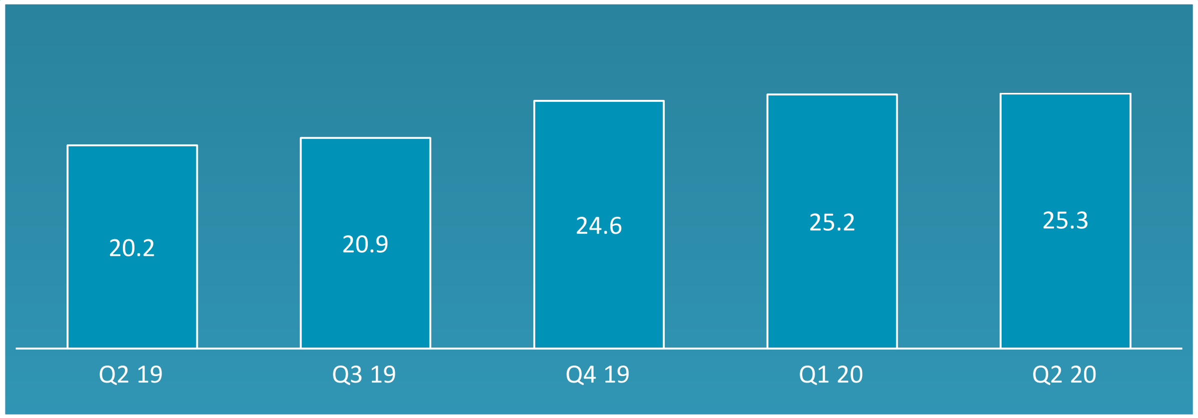
Prepay net adds (k)



Mobile customer base (k)



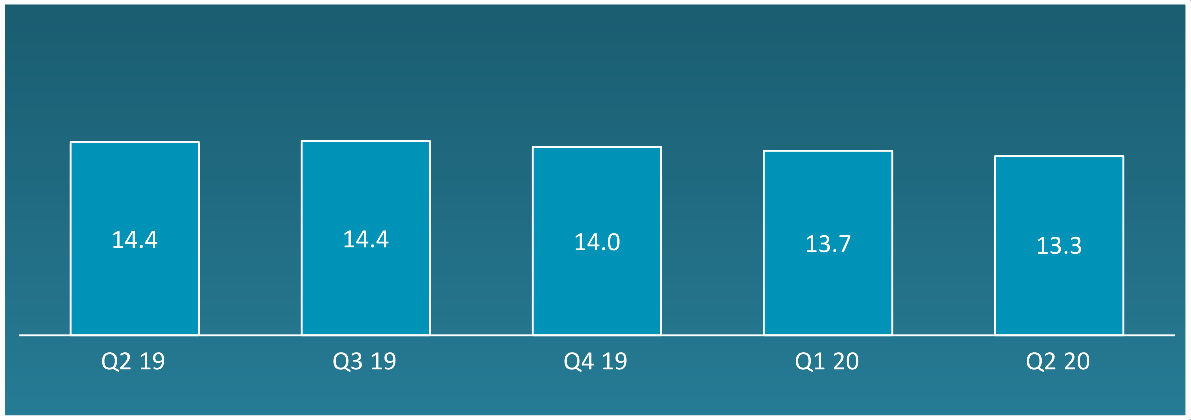
LTE customer base (m)



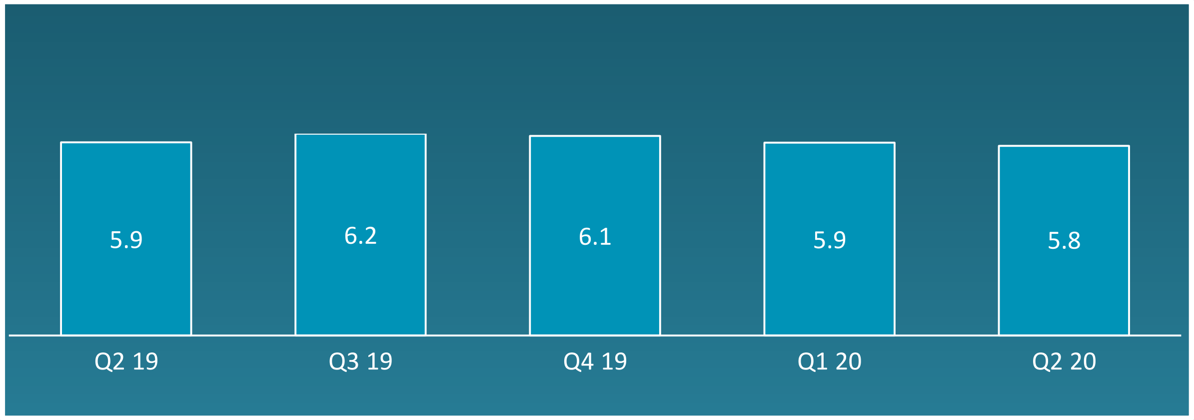
[1] excluding M2M

Mobile KPIs

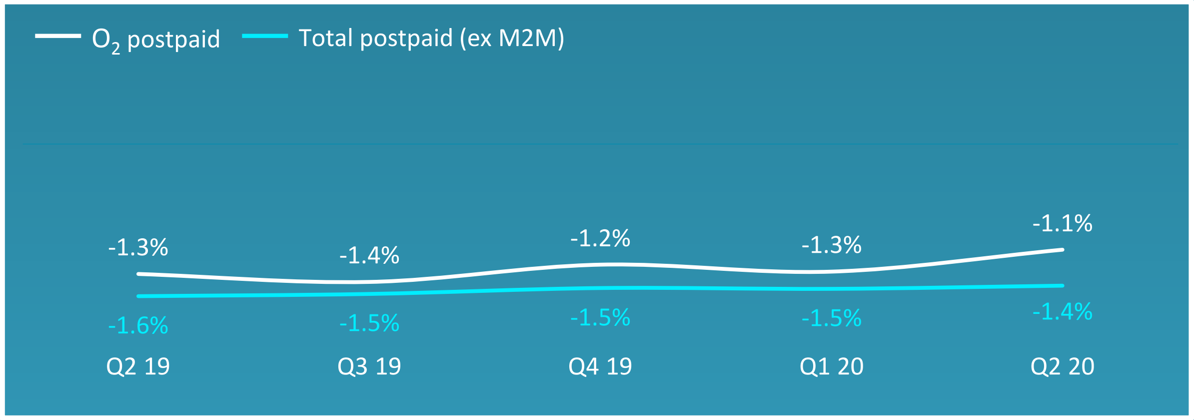
Postpay ARPU (EUR)



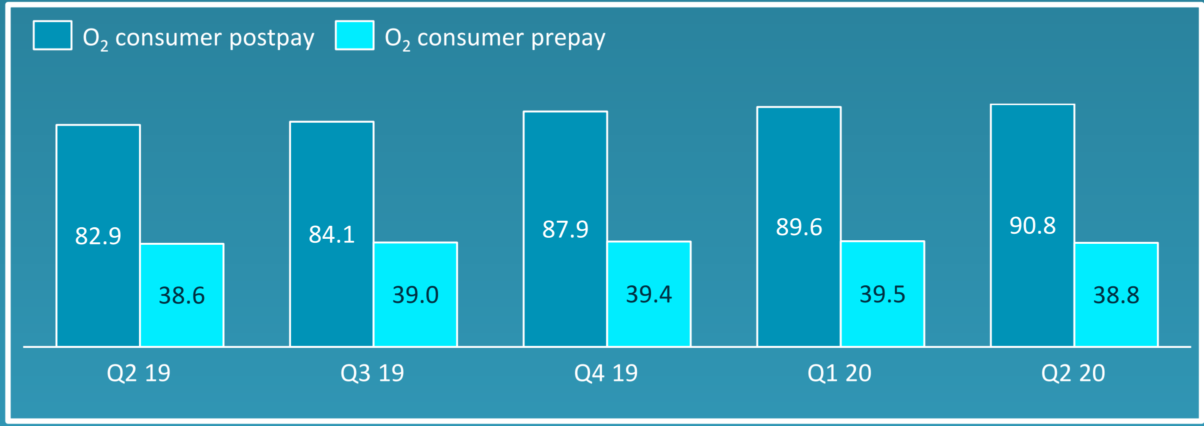
Prepay ARPU (EUR)



Churn rate (%)



Smartphone penetration (%)[1]



Telefónica Deutschland

[1] Smartphone penetration is based on the number of customers with a smallscreen tariff (e.g., for smartphones) divided by the total mobile customer base less M2M, less customers with a big screen tariff

O_2 Free mobile portfolio

	O_2 Free Unlimited Basic	O_2 Free Unlimited Smart	O_2 Free Unlimited Max
Datenvolumen	Unlimited GB	Unlimited GB	Unlimited GB
Max Surfgeschwindigkeit	2 MBit/s	10 MBit/s	Max. MBit/s
Netztechnologie	4G | LTE	4G | LTE 5G Ready	4G | LTE 5G Ready
Flatrate für Minuten/SMS	✓	✓	✓
EU Roaming	✓	✓	✓
Mtl. Grundgebühr bei 24 Monaten Mindestlaufzeit	29,99€	39,99€	49,99€

Preis in € inkl. Mwst.

- Unbegrenztes Datenvolumen
- Mit der passenden Surf-Geschwindigkeit
- 5G Bereit für 5G
- **Voll flexibel:** Auf Wunsch ohne Laufzeit
- Ab 29,99 Euro im Monat

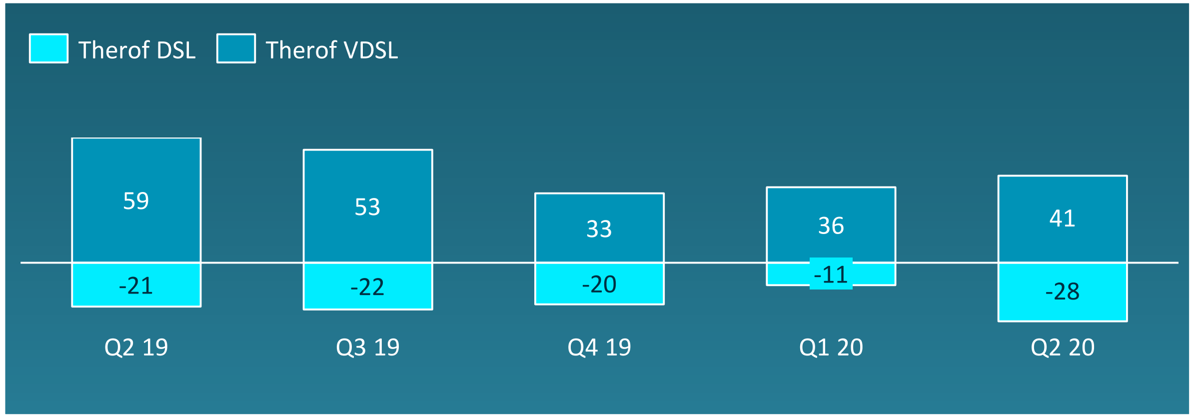
	O_2 Free S	O_2 Free M	O_2 Free L
Datenvolumen	3 GB	20 GB	60 GB
Max Surfgeschwindigkeit	Max. Mbit/s	Max. Mbit/s	Max. Mbit/s
Netztechnologie	4G | LTE	4G | LTE	4G | LTE 5G Ready
Flatrate für Minuten/SMS	✓	✓	✓
EU Roaming	✓	✓	✓
Mtl. Grundgebühr bei 24 Monaten Mindestlaufzeit	19,99€	29,99€	39,99€

- 2x BOOST mit CONNECT Doppeltes Datenvolumen für bis zu 10 Geräte
- 5G Bereit für 5G
- **Voll flexibel:** Auf Wunsch ohne Laufzeit
- Von 10 auf 20 GB für 29,99 Euro

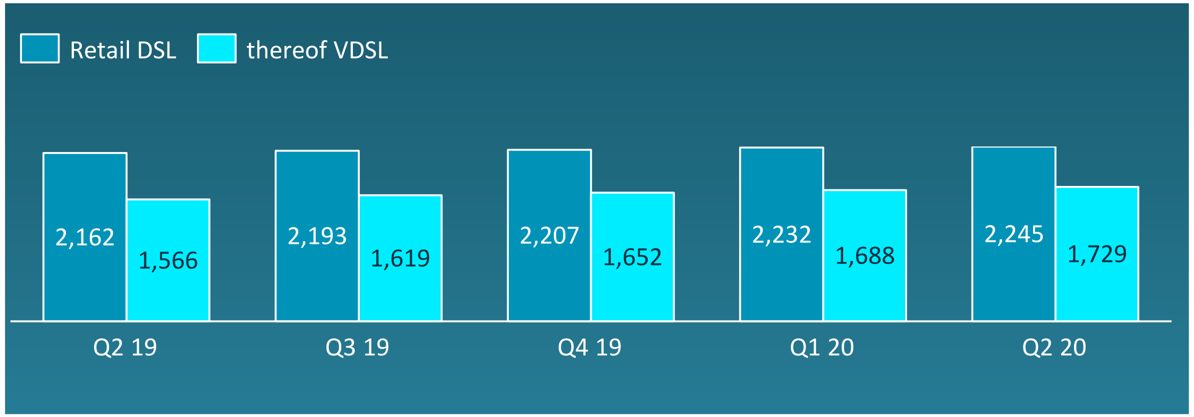
Telefonica Deutschland

Fixed KPIs

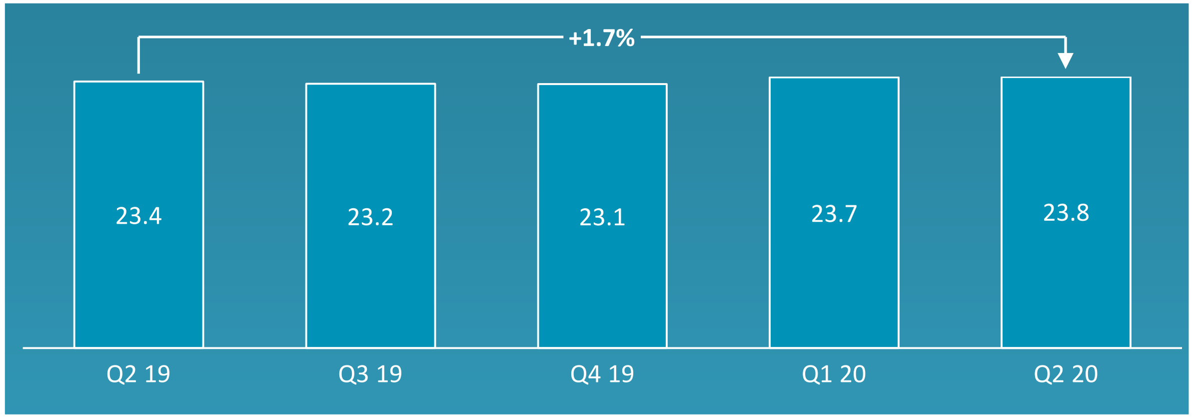
Retail broadband net adds ('000)



Fixed accesses ('000)



Fixed retail ARPU (EUR)



O_2 Free fixed portfolio

	O_2 my Home XL*	O_2 my Home L	O_2 my Home M	O_2 my Home S
Maximale Surf-Geschwindigkeit[1]	VDSL **250 MBit/s** (Upload: 40 MBit/s)[4]	VDSL **100 MBit/s** (Upload: 40 MBit/s)[4]	**50 MBit/s** (Upload: 10 MBit/s)	**10 MBit/s** (Upload: 2,4 MBit/s)[5]
Flatrate-Telefonieren ins dt. Festnetz und in alle dt. Mobilfunknetze[3]	✓	✓	✓	✓
Optional buchbar: HomeBox 2 AVM FRITZ!Box 7490 AVM FRITZ!Box 7590[6]	– – 5,99 mtl.	1,99 mtl. 3,99 mtl. 5,99 mtl.	1,99 mtl. 3,99 mtl. 5,99 mtl.	1,99 mtl. 3,99 mtl. 5,99 mtl.
Anschlussgebühr einmalig[2]	0,– (anstatt 49,99)	0,– (anstatt 49,99)	0,– (anstatt 49,99)	49,99
Rabattaktion[2]	1 Jahr 10,– mtl. sparen	1 Jahr 10,– mtl. sparen	1 Jahr 10,– mtl. sparen	1 Jahr 10,– mtl. sparen
Mtl. Grundgebühr reduziert für O_2 Kunden[7]	ab 24,99 (ab 13. Monat ab 34,99)	ab 14,99 (ab 13. Monat ab 24,99)	ab 9,99 (ab 13. Monat ab 19,99)	–
Mtl. Grundgebühr (bei 24 Monaten Laufzeit)	**34,99** ab 13. Monat 44,99	**24,99** ab 13. Monat 34,99	**19,99** ab 13. Monat 29,99	**14,99** ab 13. Monat 24,99

Telefónica

Deutschland