

# 2022 Q4 Investor Presentation



# Disclaimer

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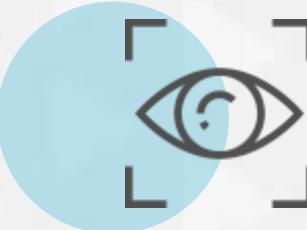
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Note: EBITDA is a non-GAAP financial measure. The EBITDA definition used in this investor presentation includes revenues, cost of sales, marketing, sales and distribution expenses, general administrative expenses, research and development expenses and other operating income/(expense), and income/(expense) from investing activities, but excludes depreciation, amortization and impairment expenses, financial income/(expenses) presented in other operating income/(expenses) (i.e. FX gain/(loss), interest and rediscount income/(expense) on current accounts excluding bank borrowings).

# Agenda

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# Overview



# Türk Telekom Highlights

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**Leading  
Operator in Türkiye  
Integrated telecom  
services**



**99%**  
**LTE**

Population coverage



**31.4mn**

**Fibre homepass\***

\* includes FTTC & FTTH/B

**50%**  
**Fibre connected  
LTE base stations**



**2<sup>nd</sup>  
player**

in Pay TV market



Serving  
**52.8mn**  
Subscribers

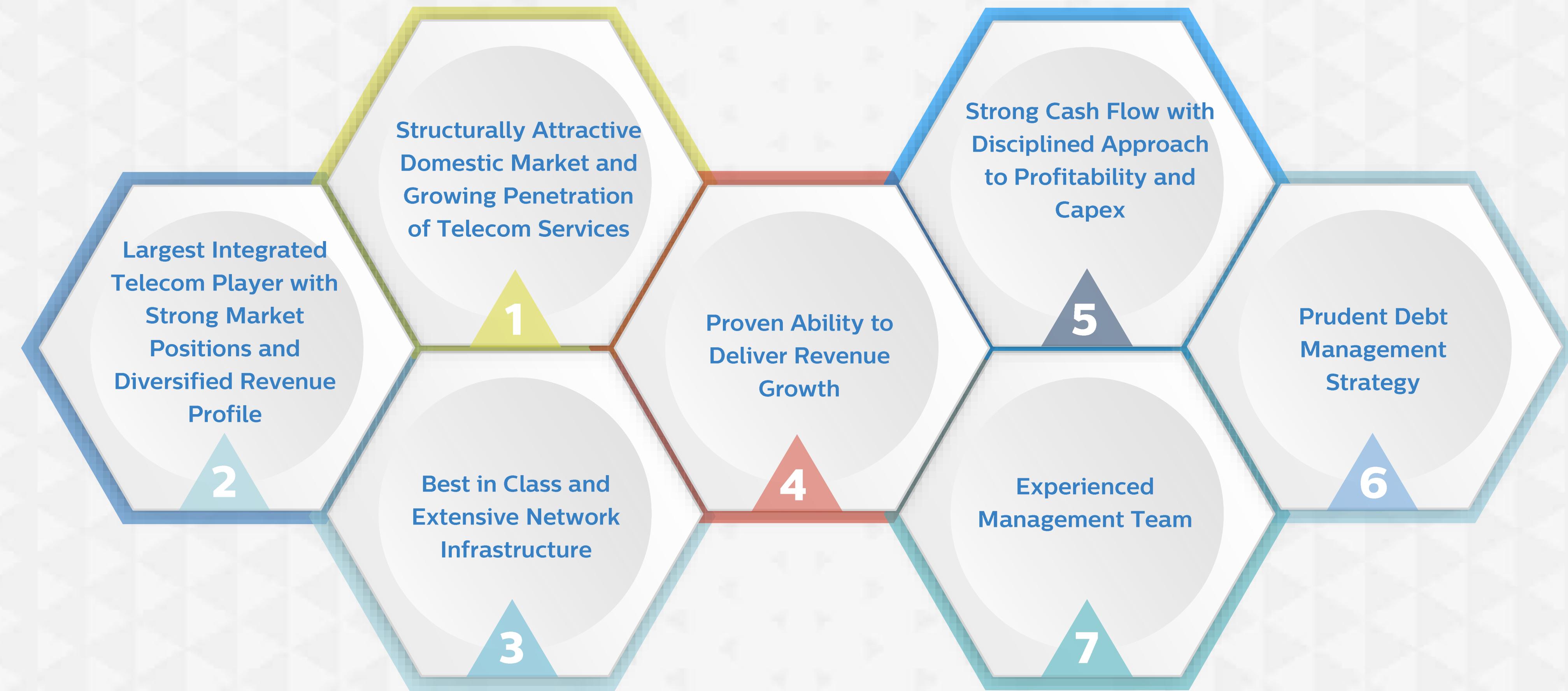


**403k km**  
Fibre network in  
**81 cities**



**39,433**  
Number of employees

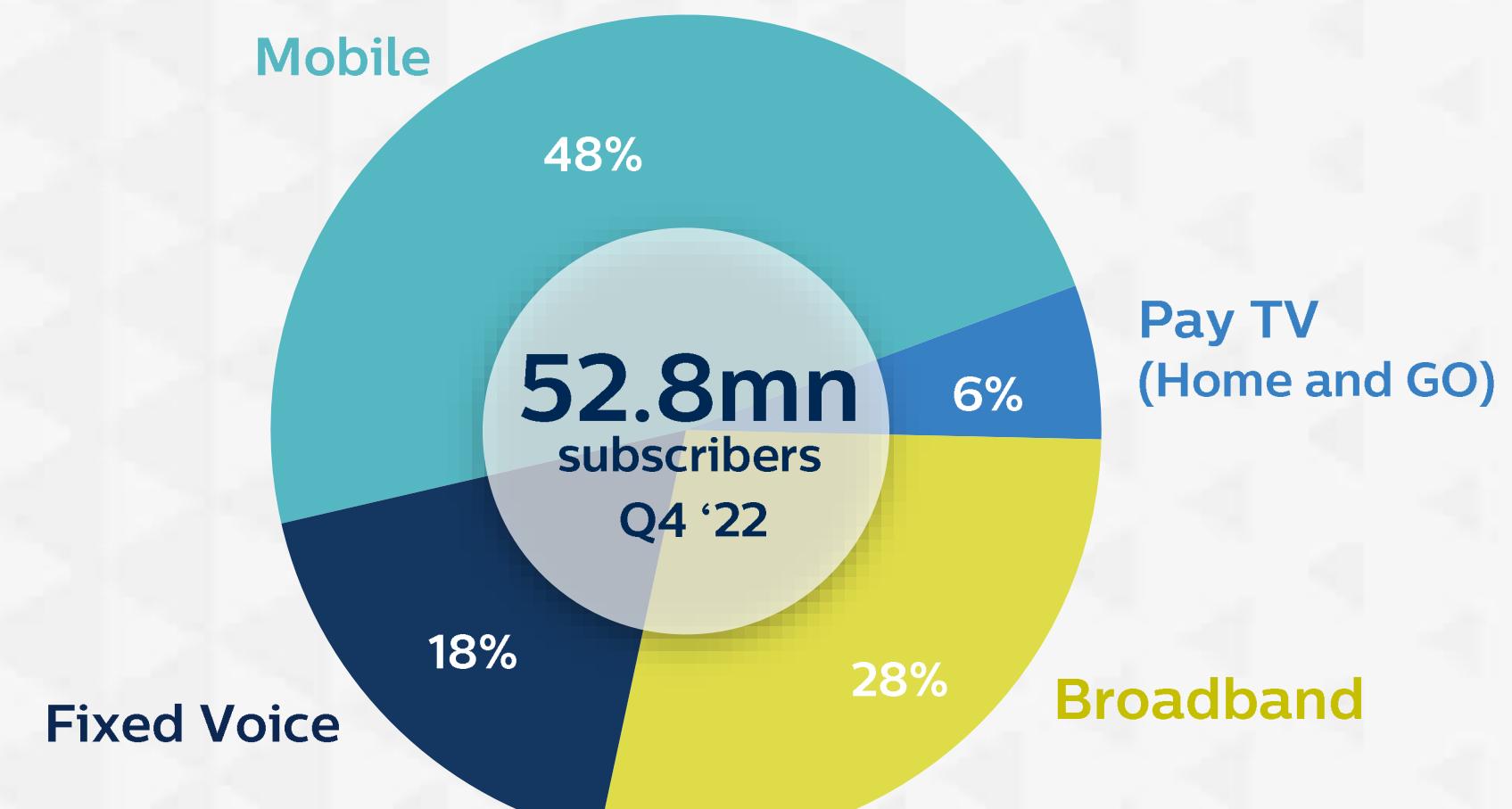
# Creating More Value



# Diversified Portfolio & Strong Market Position

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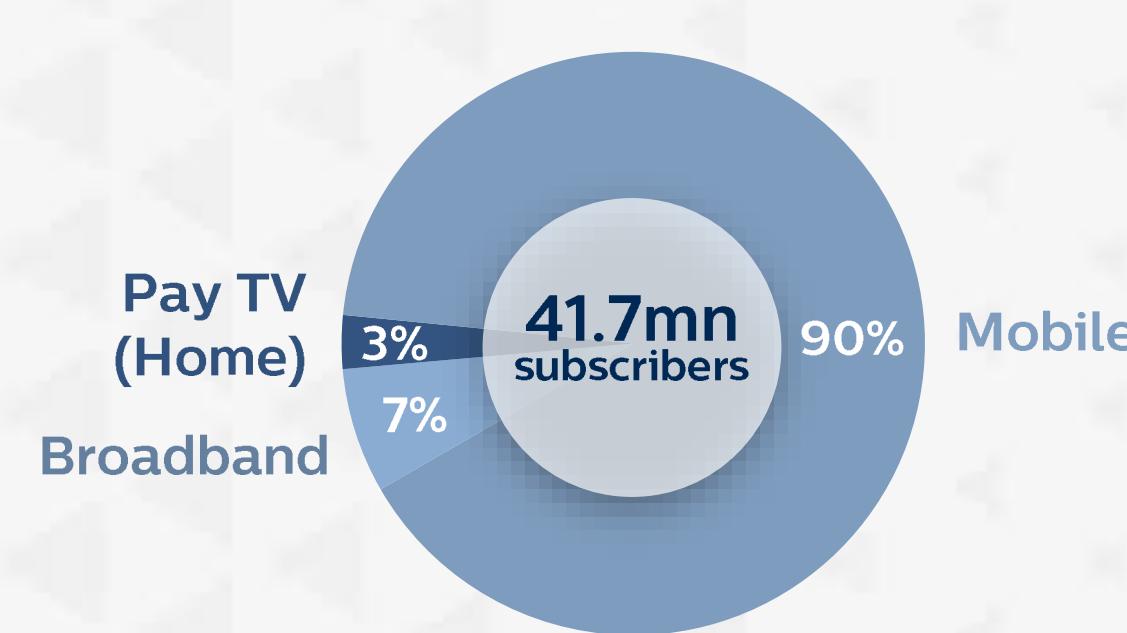
## Diversified Subscriber Base



## Vodafone

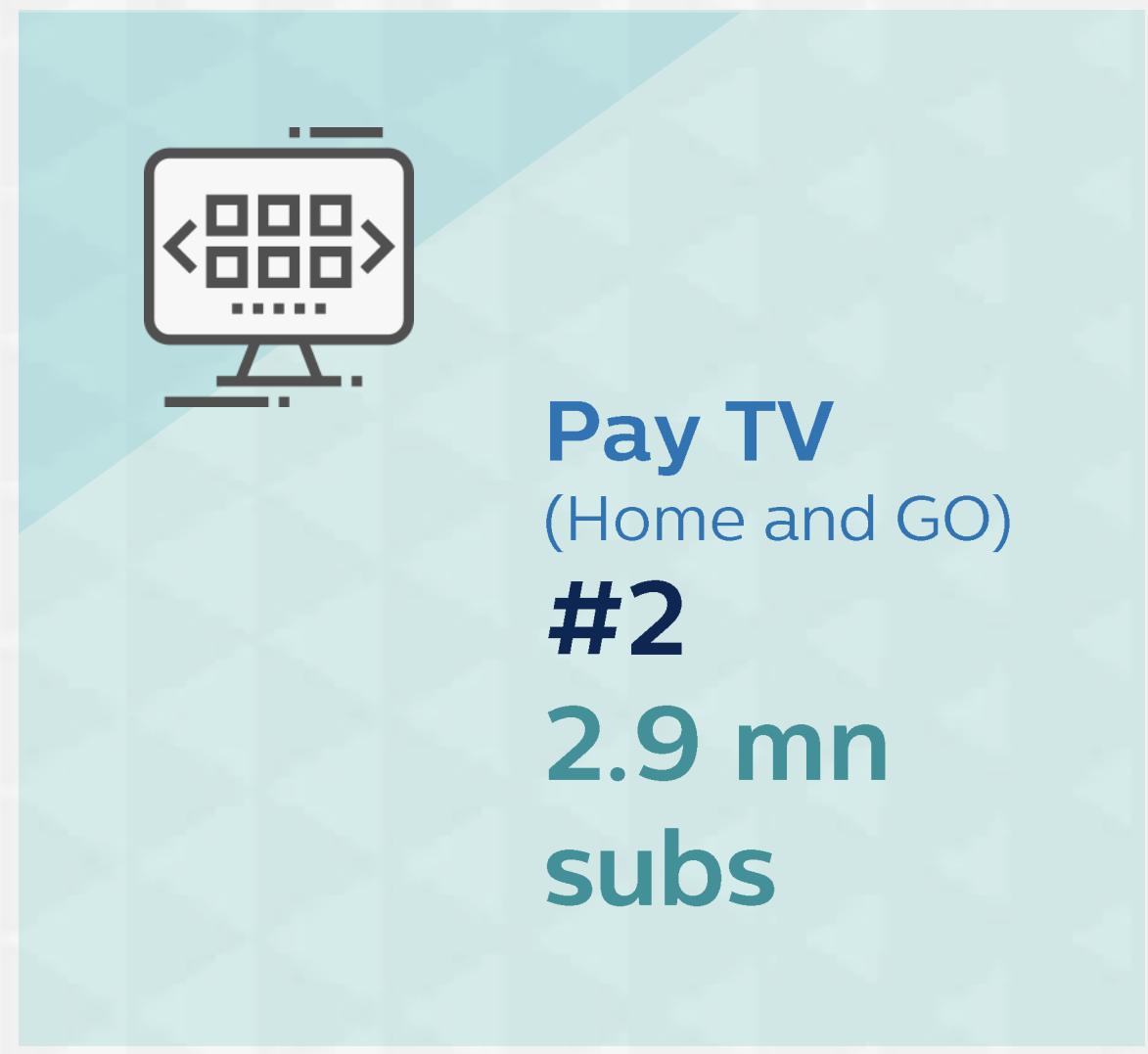
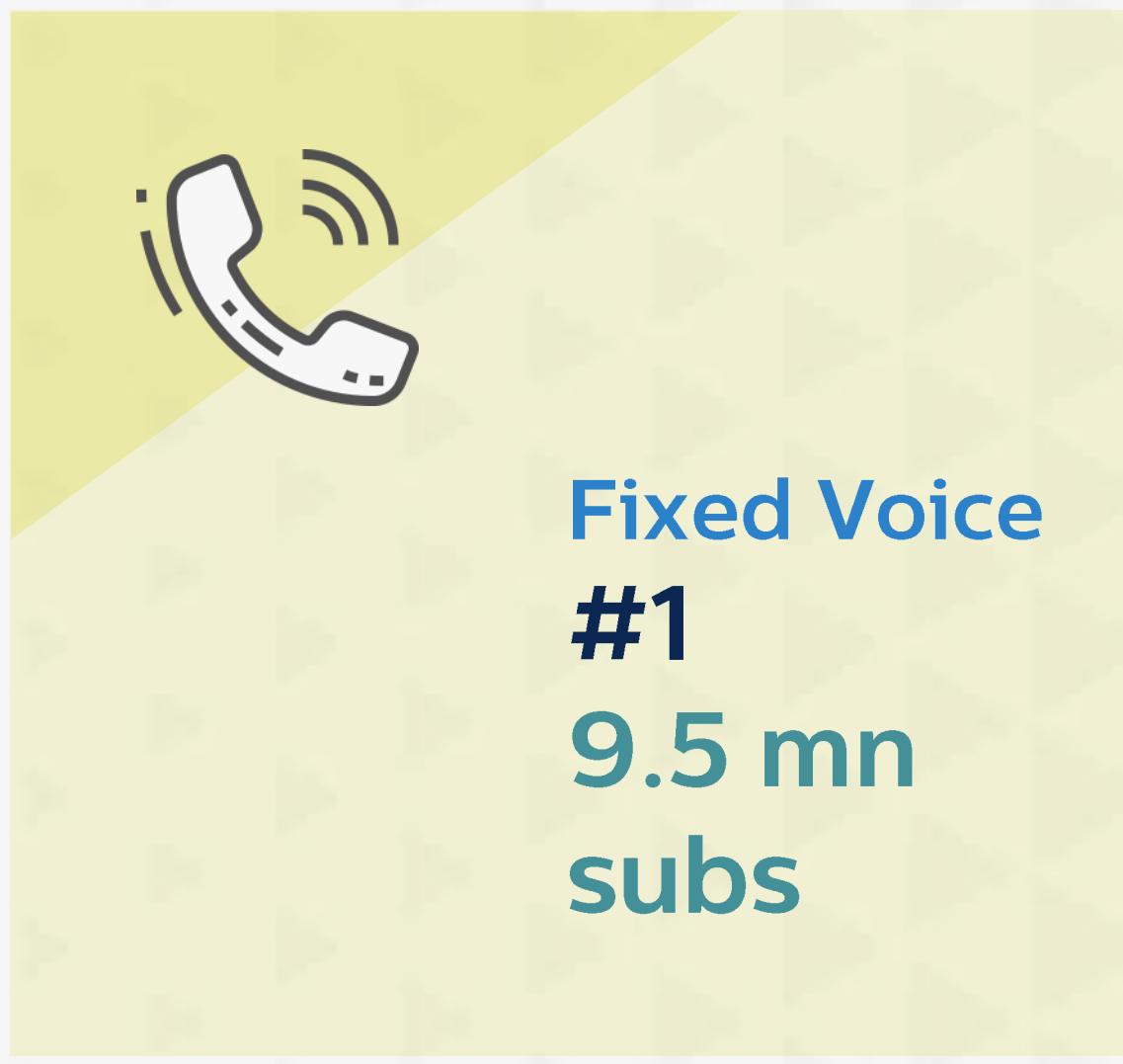
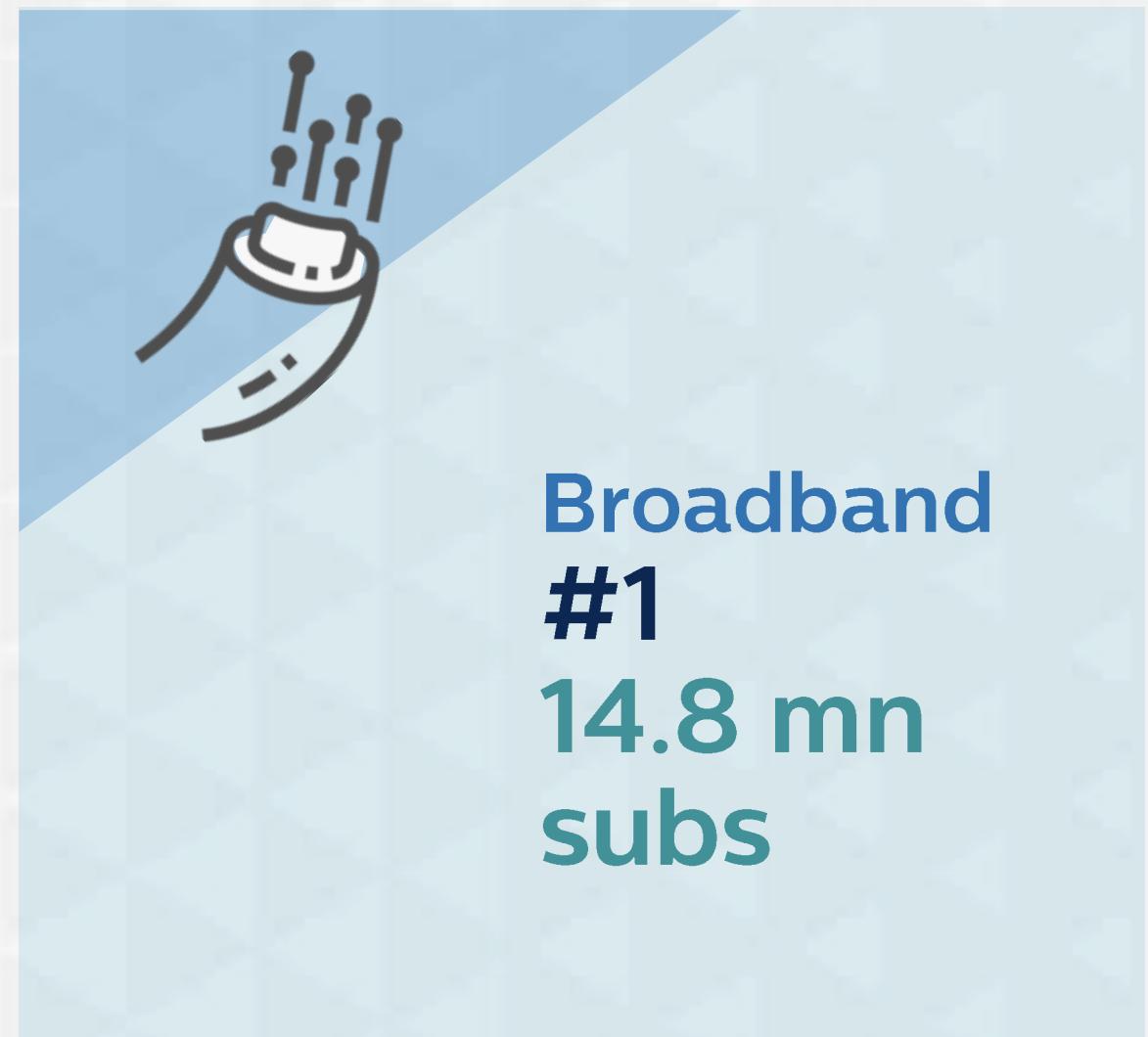
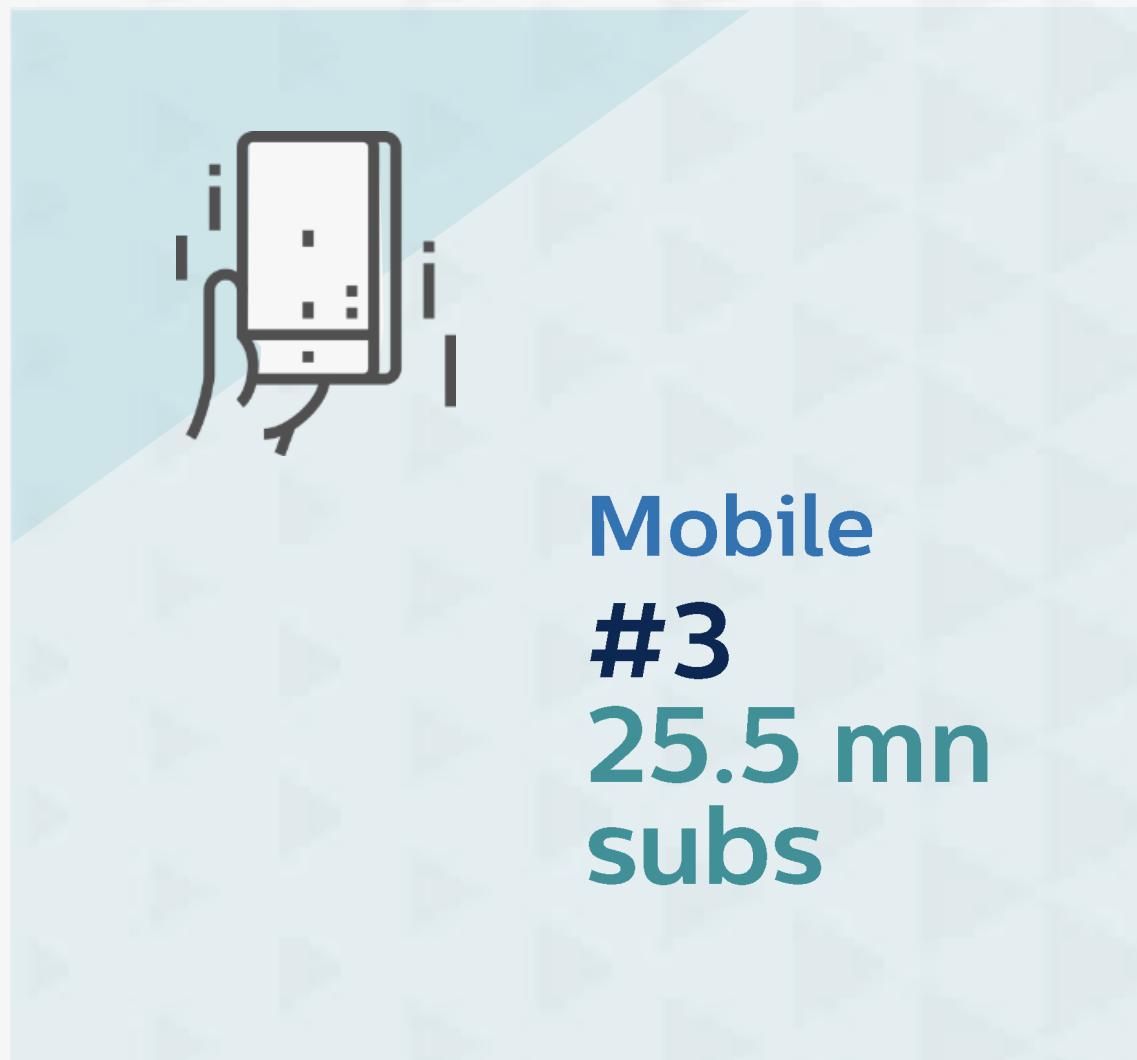


## Turkcell



Turkcell and Vodafone data are from their own publications as of Q4 '22.

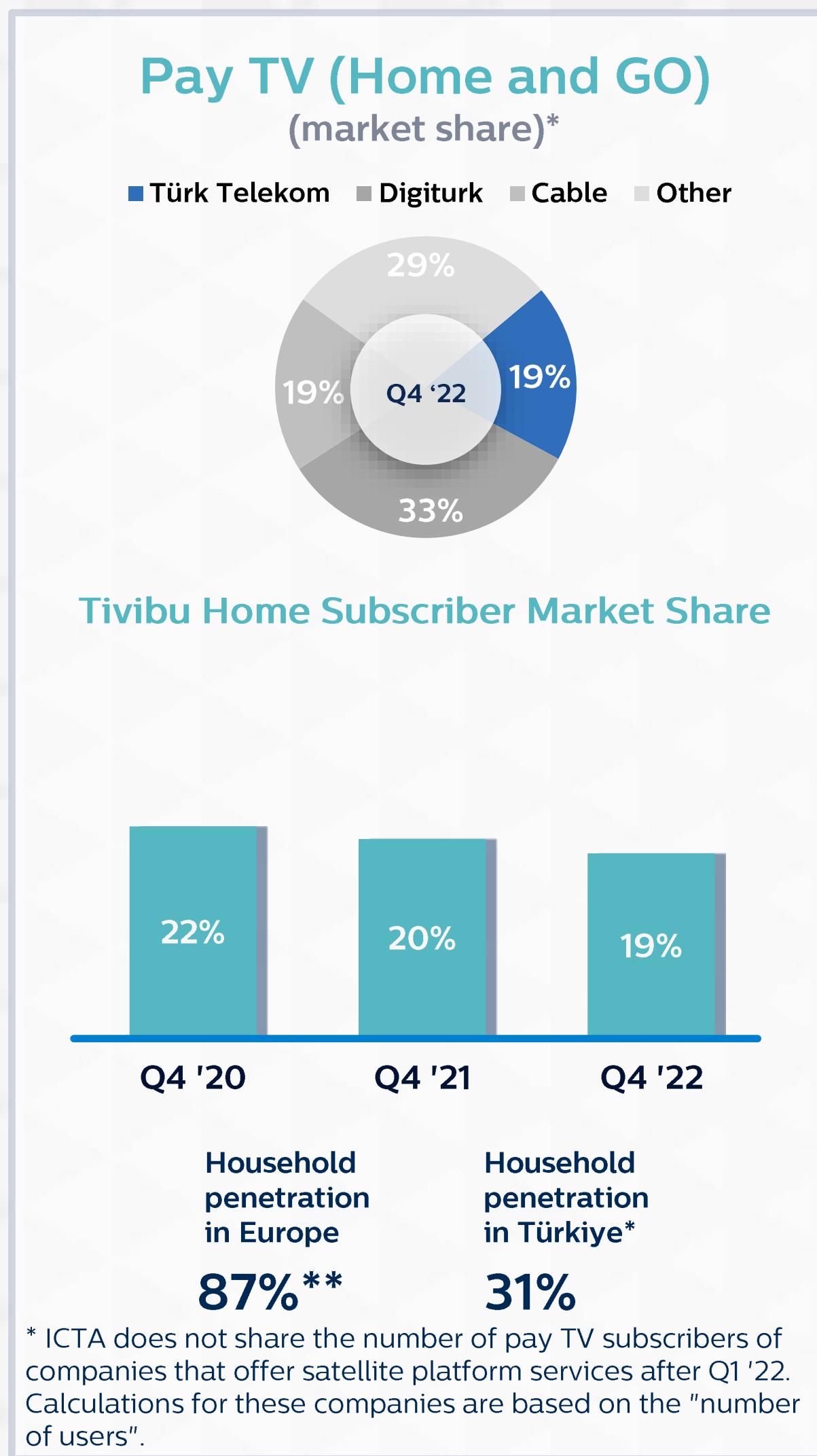
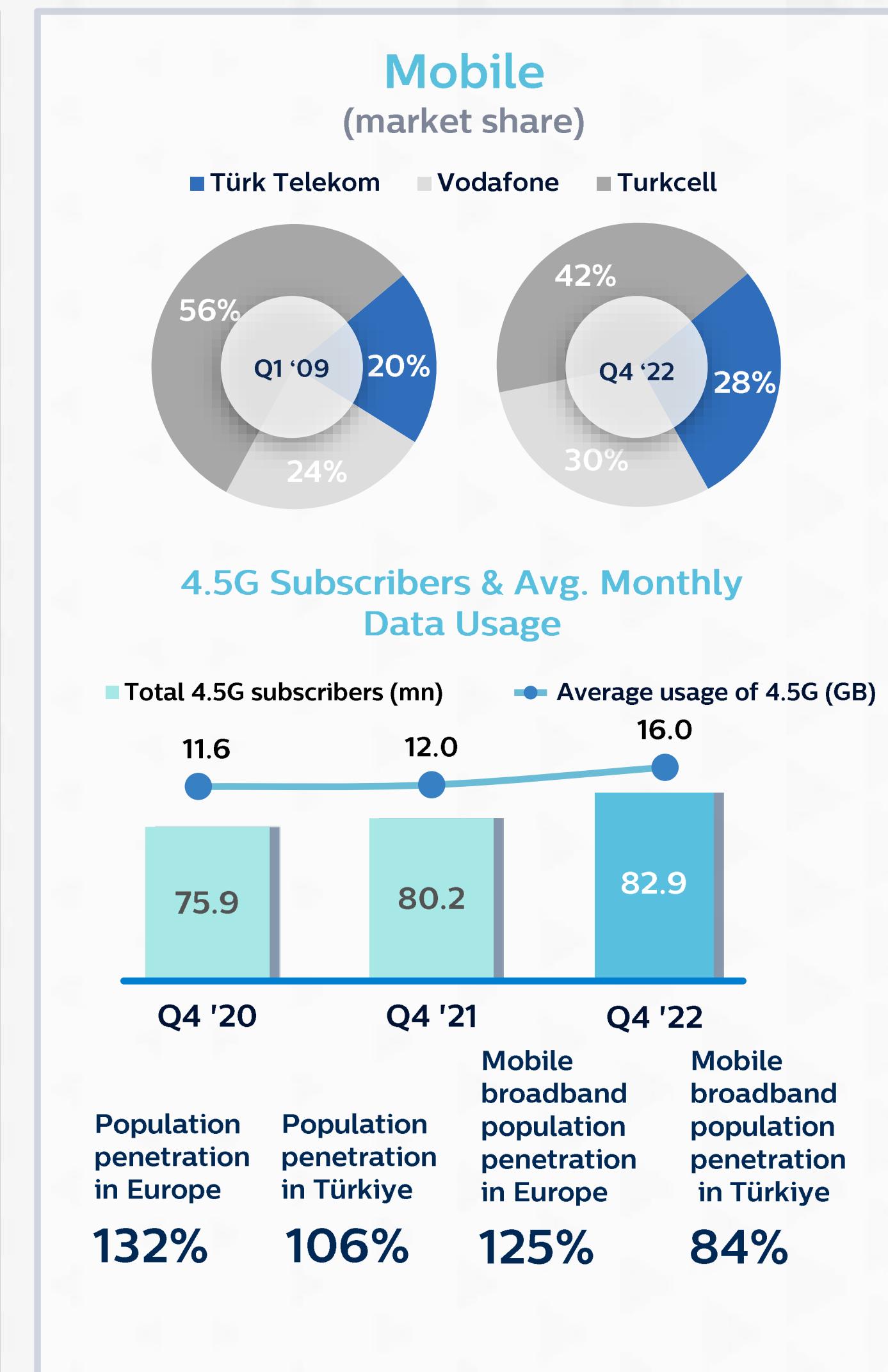
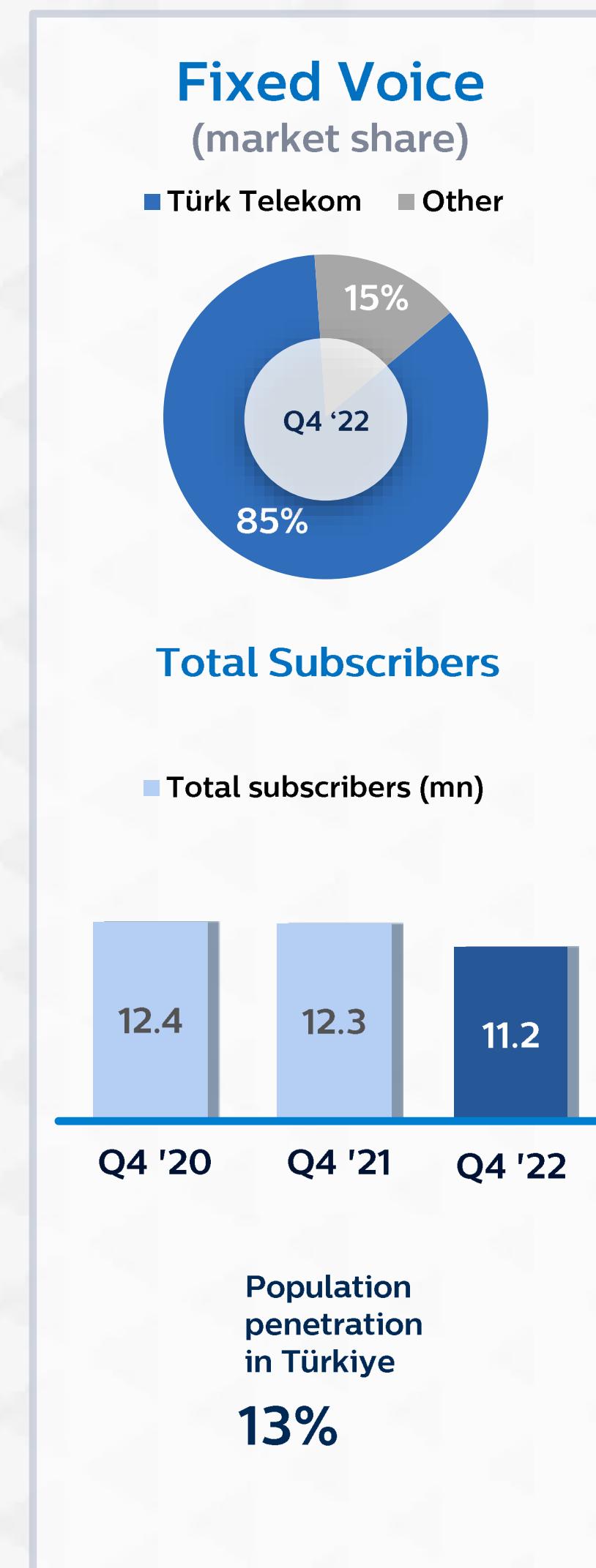
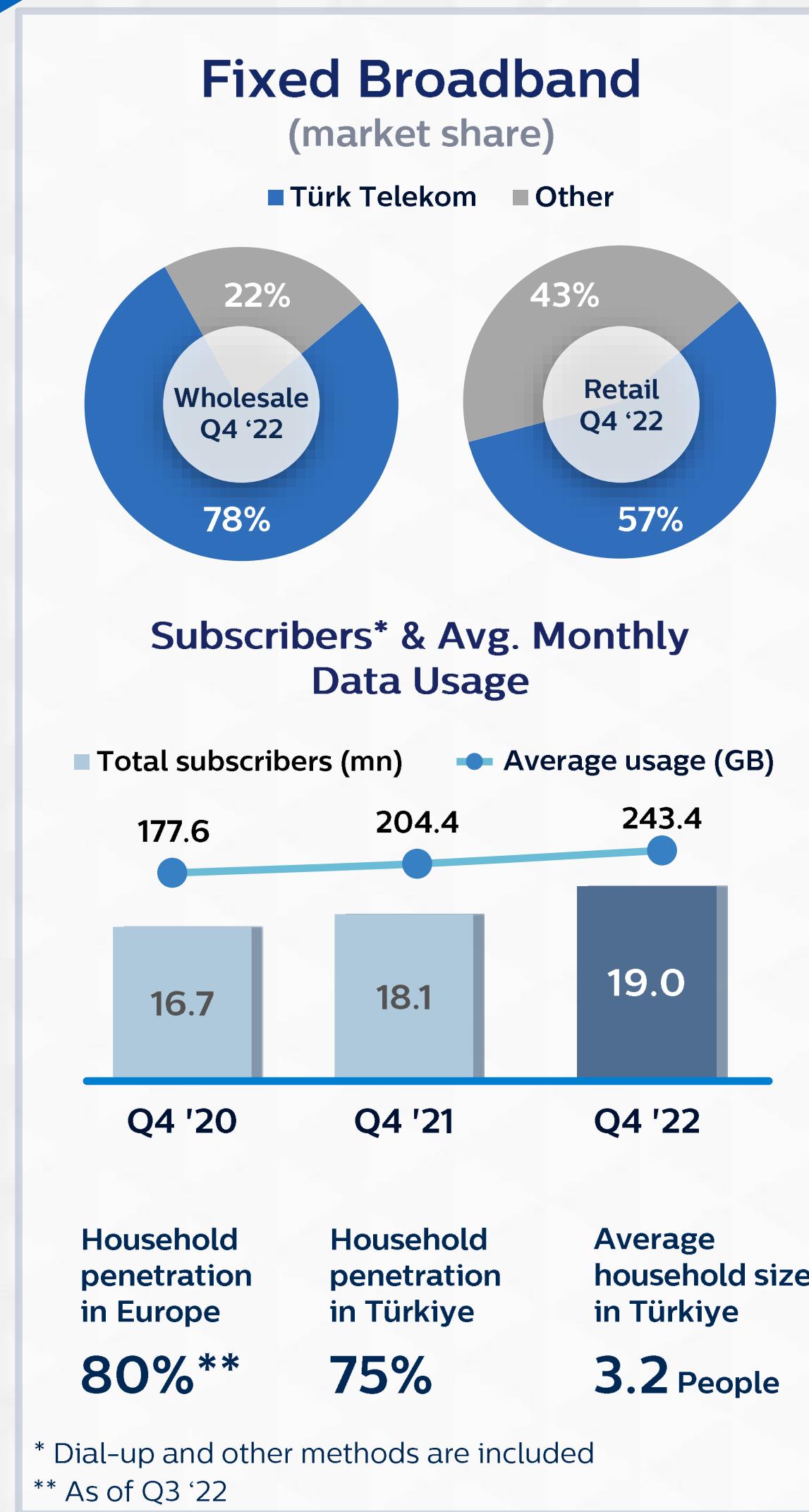
\* Excludes M2M subscribers



Market share ranks are from the Q4 '22 ICTA report.

# Built on Solid Foundations

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Fixed broadband and Pay TV Türkiye household penetration is based on our calculation.

Fixed broadband and Pay TV markets include 27 European countries and the UK.

Mobile market includes 14 European countries and the UK.

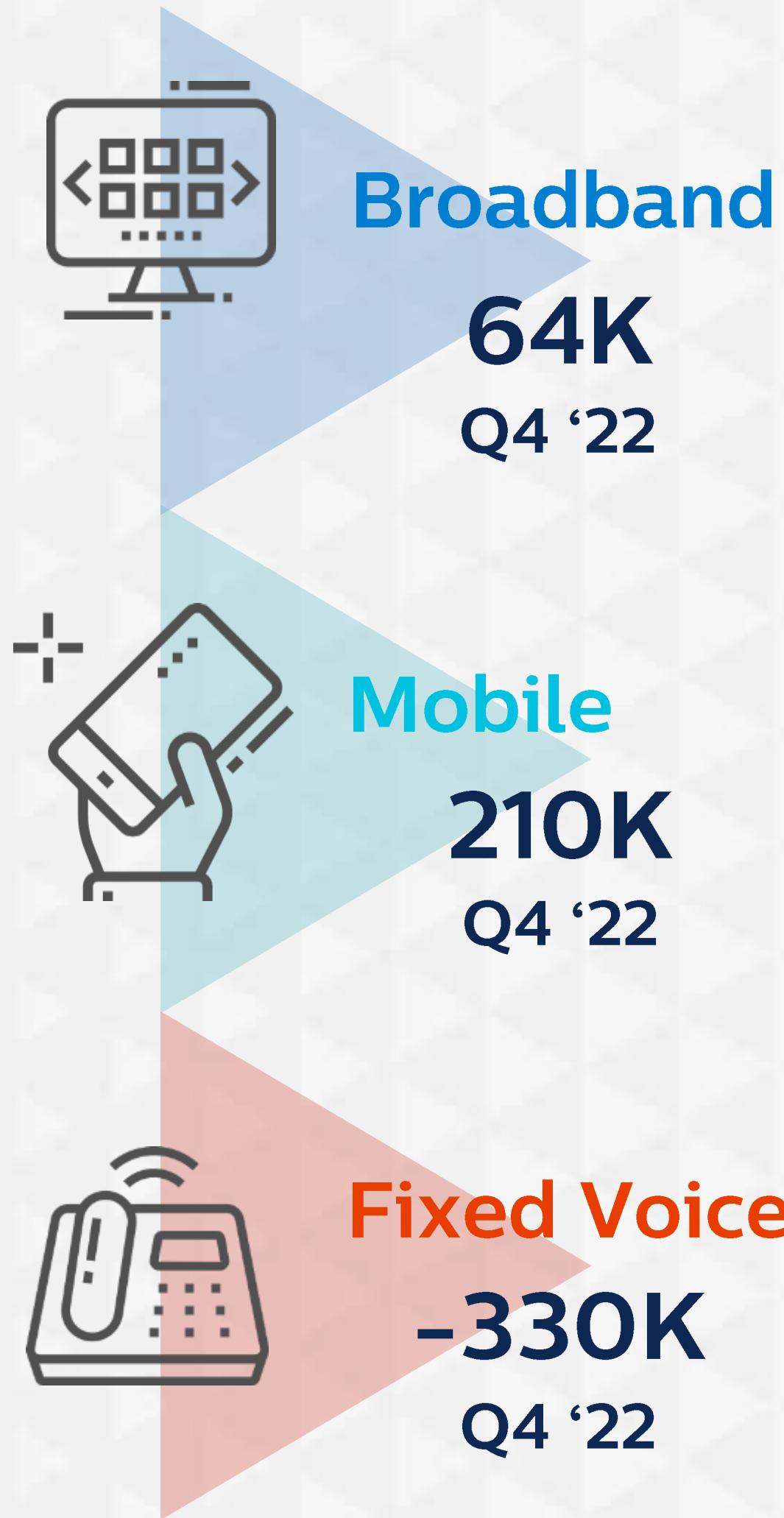
Source: Analysys Mason, ICTA

# 2022 Highlights



# Net Subscriber Additions

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517K  
2022

1.5mn  
2022

-974K  
2022



\* Includes Tivibu



# Financial & Operational Overview

## 2022 Highlights



### Total Subscribers

**52.8 mn**  
▲ 2% YoY



**TL 48.0 bn**  
▲ 40% YoY



**TL 19.1 bn**  
▲ 17% YoY



**39.9%**  
▼ 800bps YoY



### Net Income

**TL 4.1 bn**  
▼ 28% YoY



### Free Cash Flow\*

**TL 5.1 bn**  
▼ 38% YoY



### CAPEX

**TL 13.9 bn**  
▲ 58% YoY



### Net Leverage

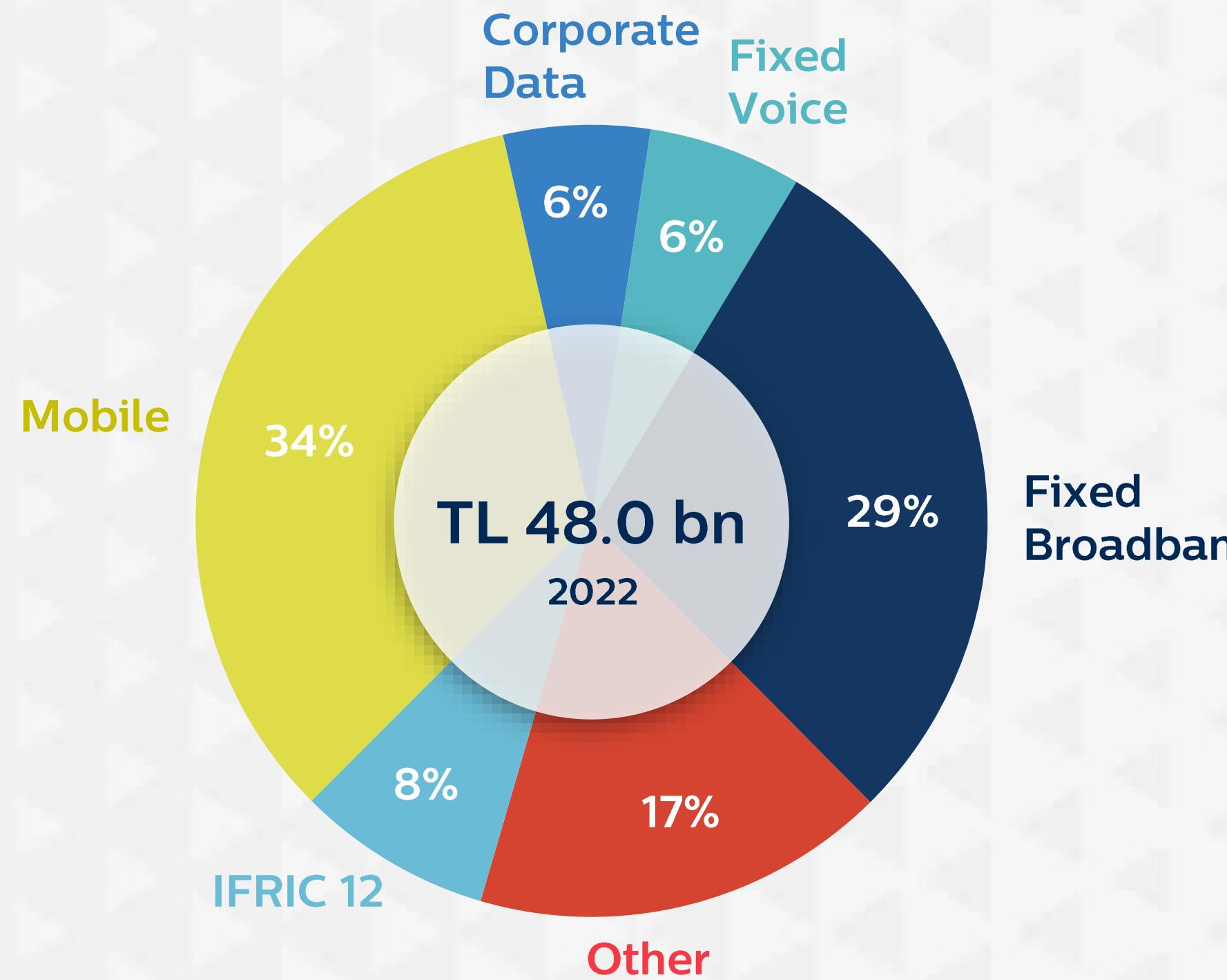
**1.47x**  
2021 1.11x

\* Unlevered cash flow is defined as net cash provided by operating and investing activities, from operations.

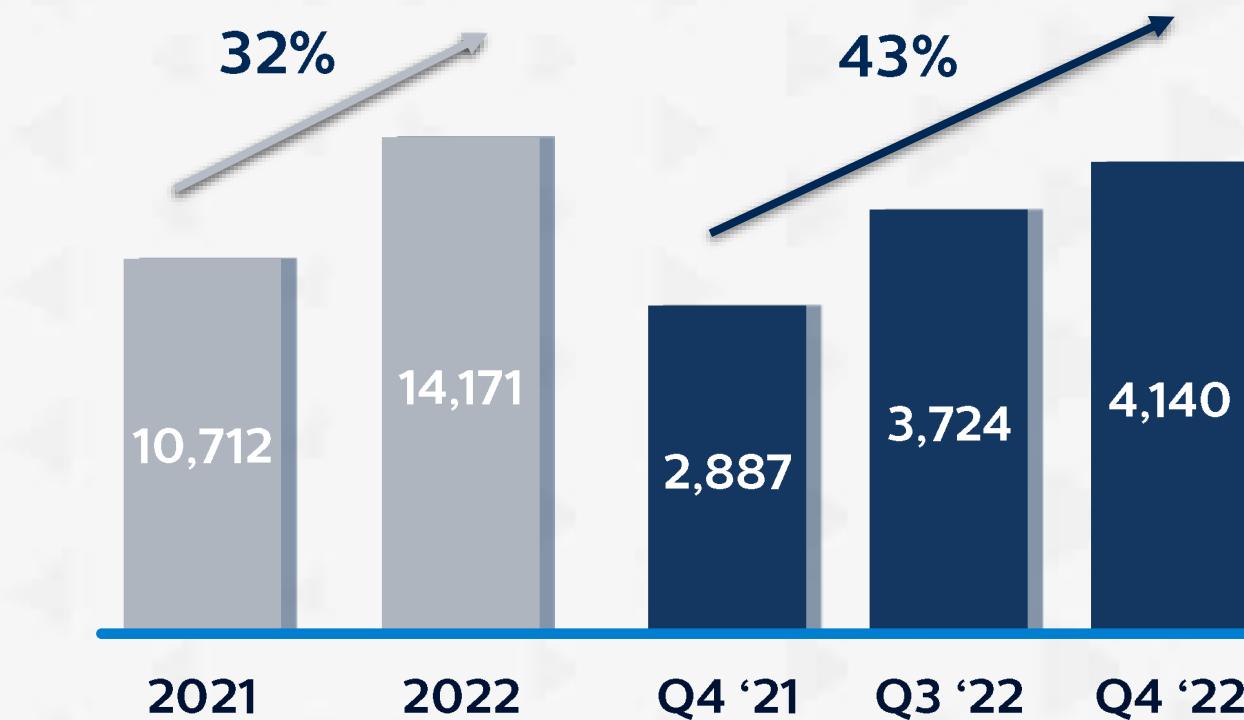
# High Growth Areas

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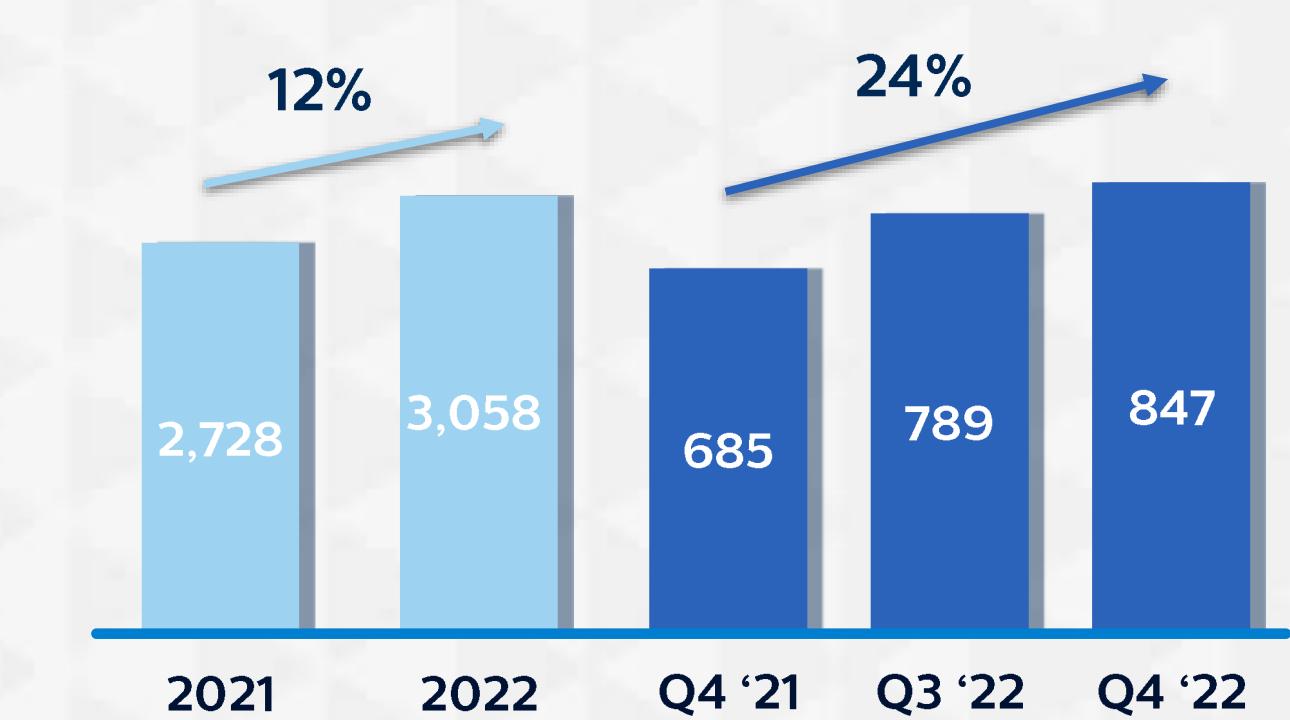
## 2022 Revenue Breakdown (% of Consolidated Revenue)



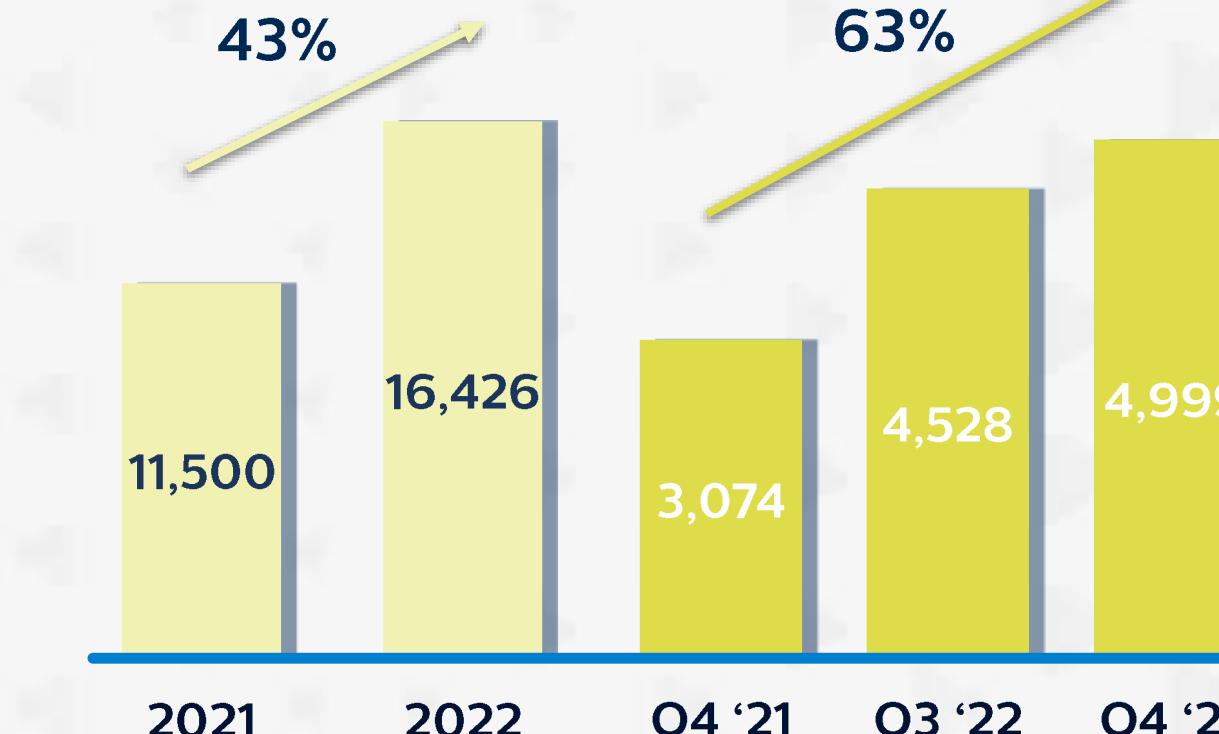
**Fixed Broadband**  
(TL mn)



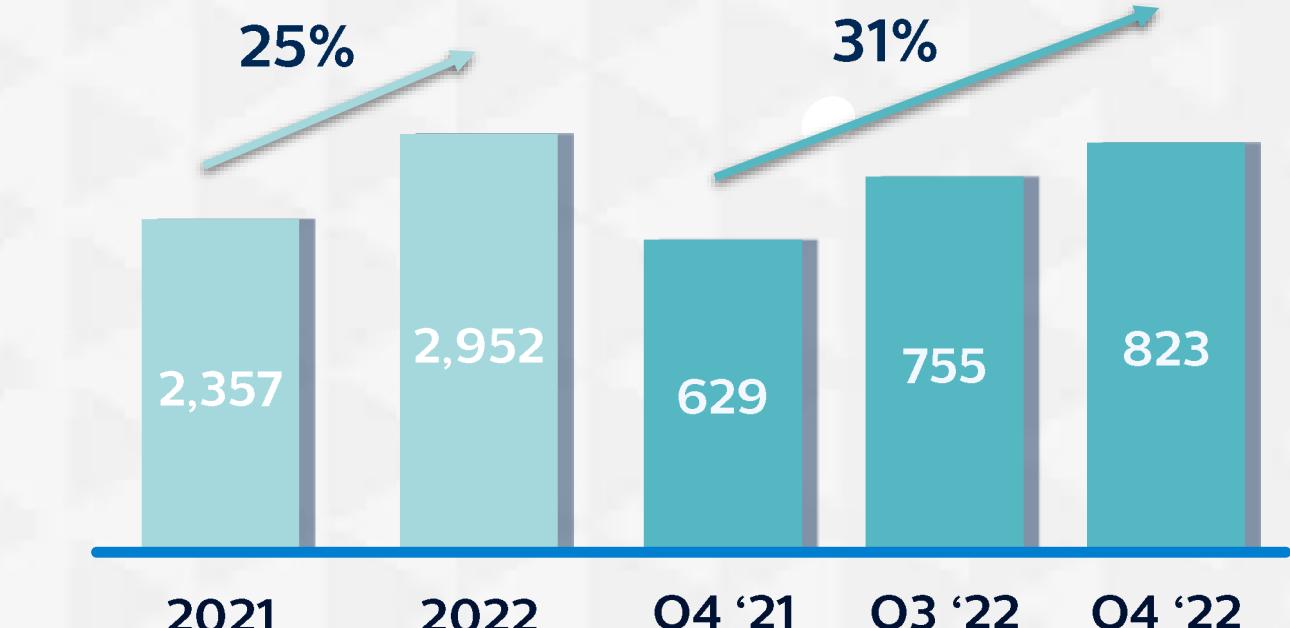
**Fixed Voice**  
(TL mn)



**Mobile**  
(TL mn)



**Corporate Data**  
(TL mn)

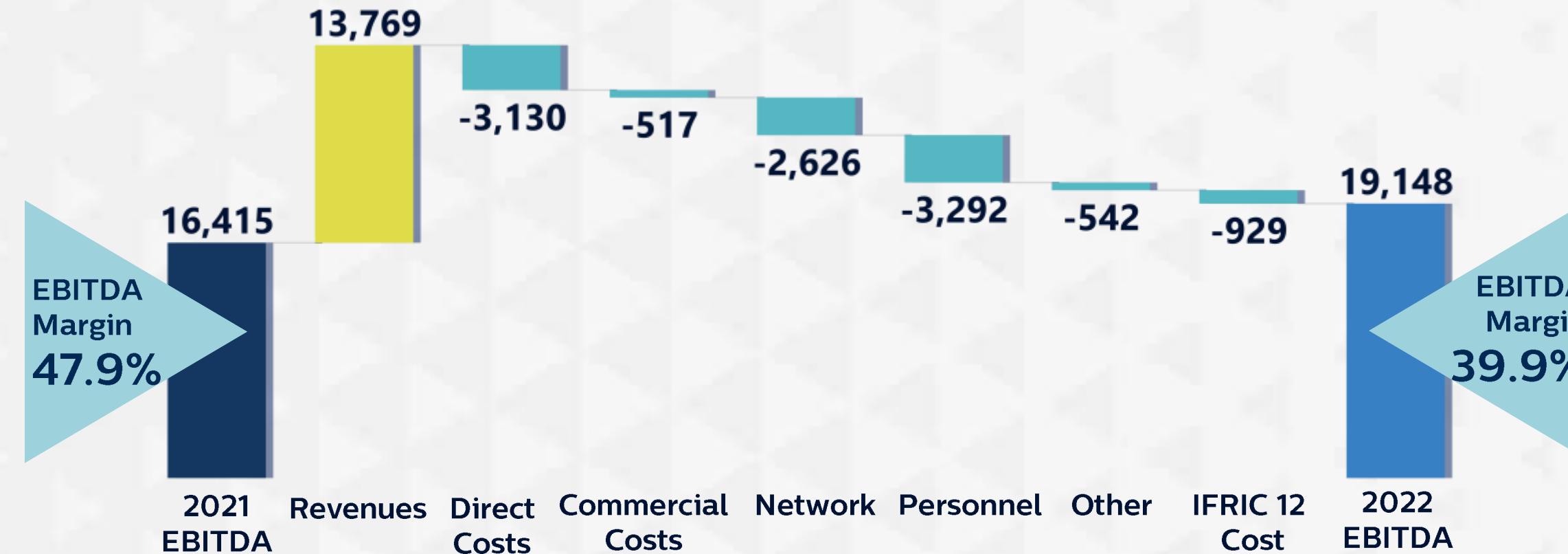


# Proactive Margin Management

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## Consolidated EBITDA Development

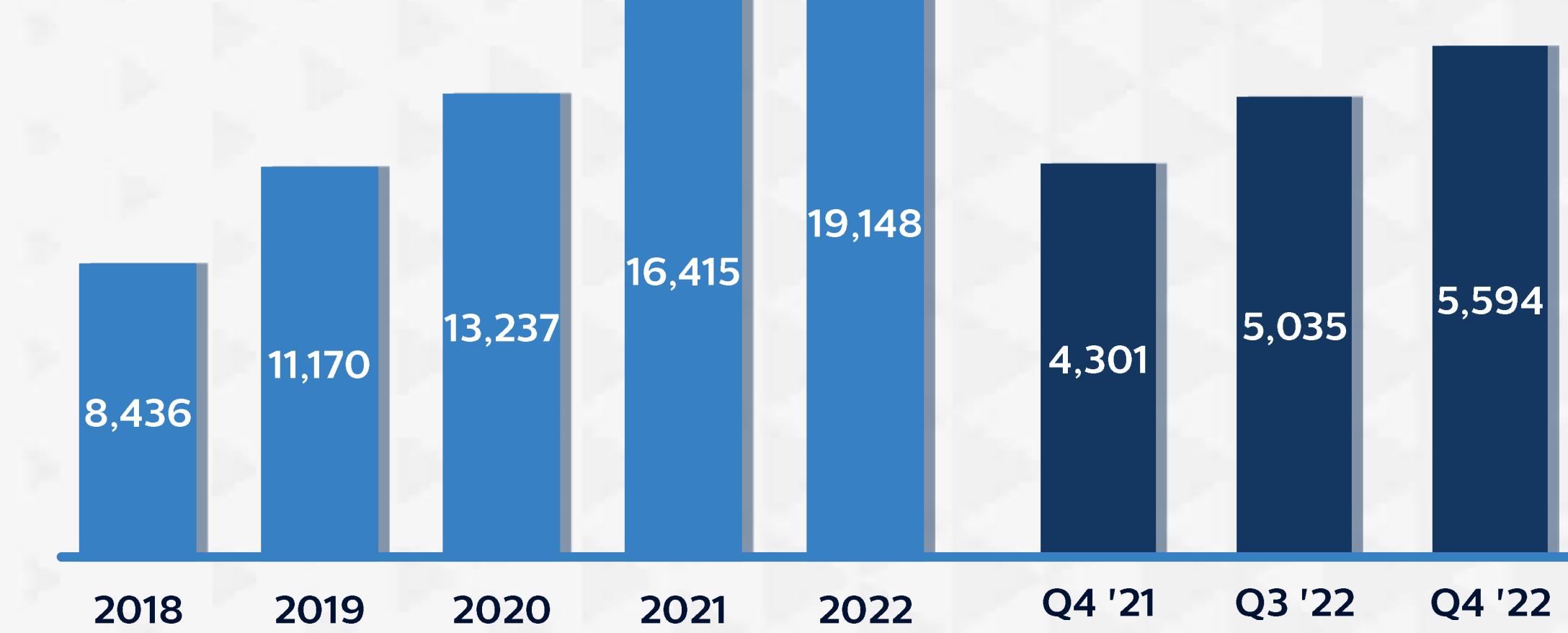
(TL mn)



## EBITDA & EBITDA Margin

(TL mn)

■ EBITDA (TL mn) ● EBITDA Margin



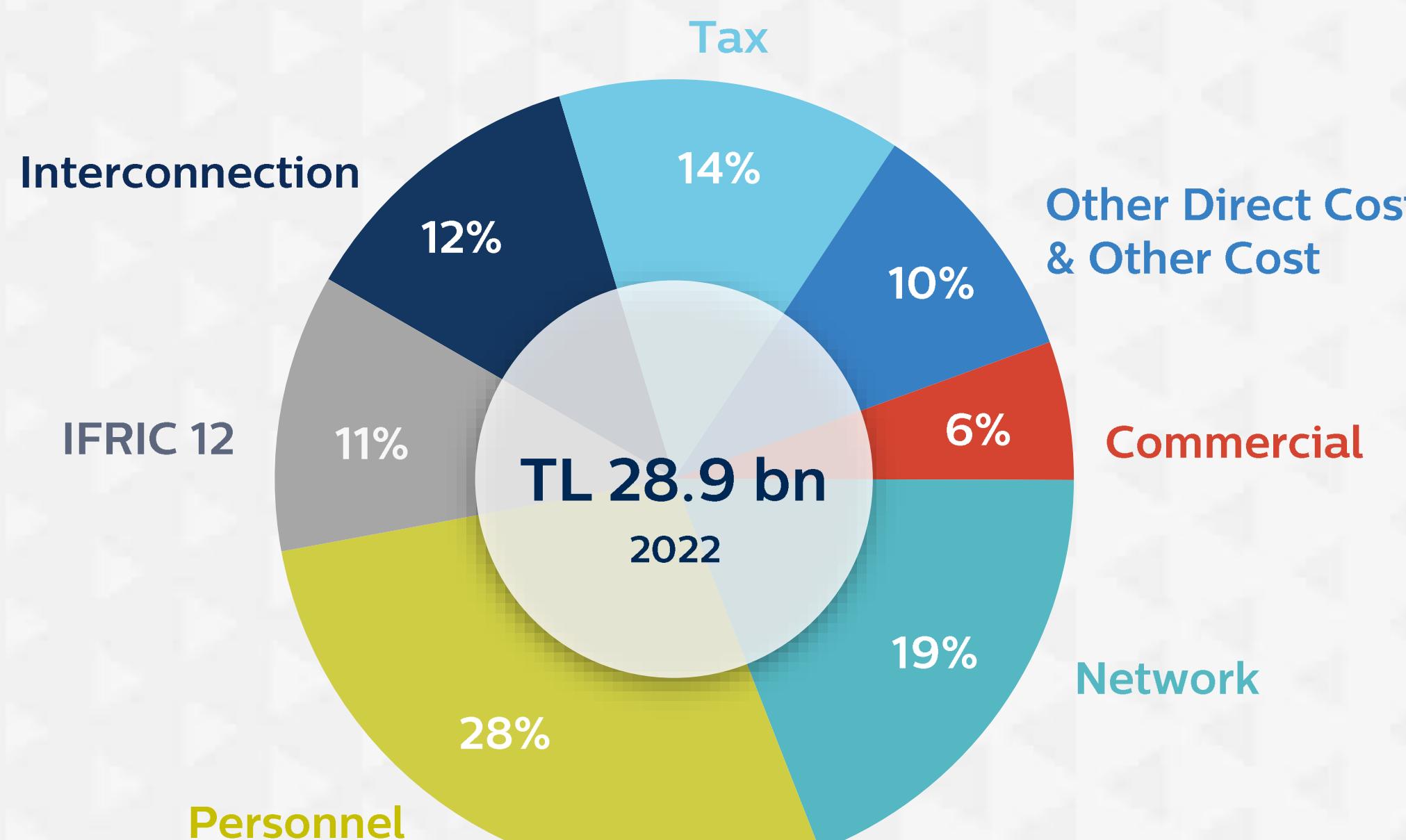
Türk Telekom adopted IFRS 15 and IFRS 16 accounting standards starting from 1 January 2018 and 1 January 2019, respectively.  
For further details please refer to "Financial Footnotes" & "Summary Financial and Operational xls" on our website.

# Focus on Efficiency

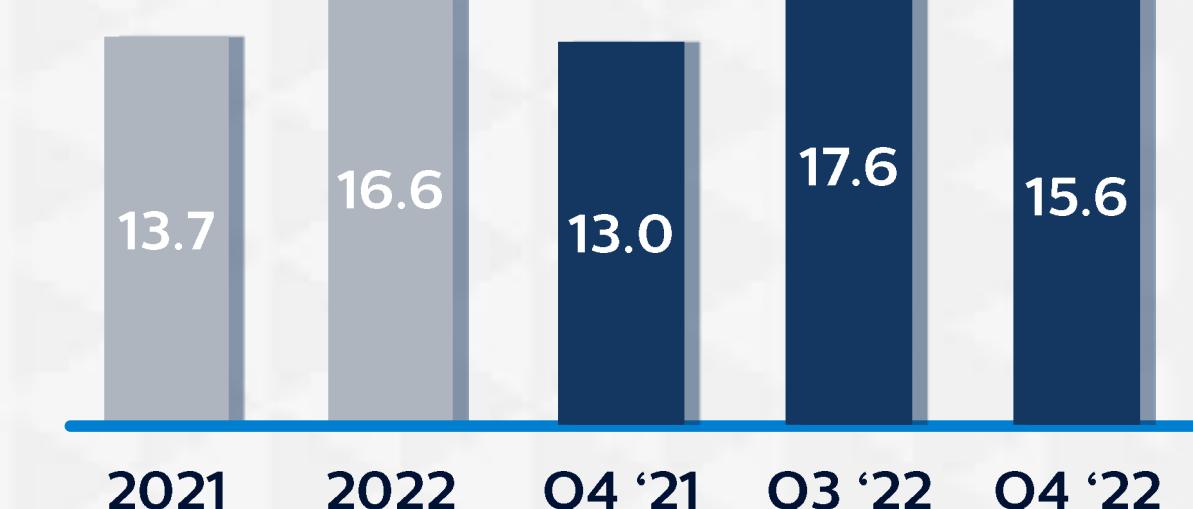
14

## 2022 Opex Breakdown

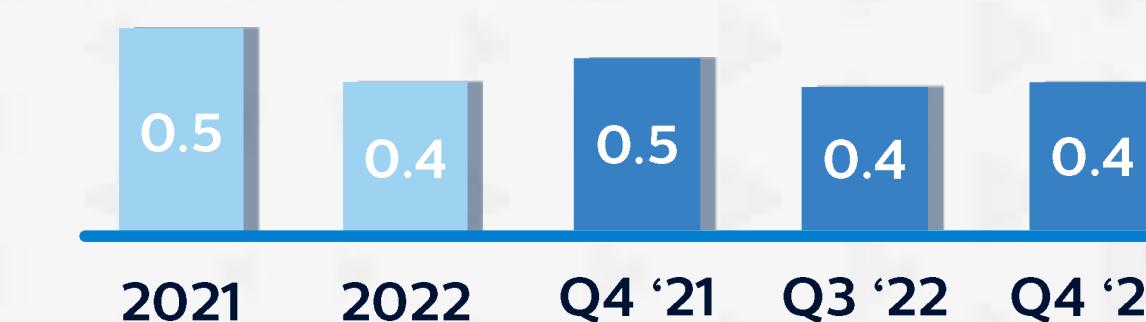
(% of Consolidated Opex)



## Personnel Expense to Sales (%)



## Provision for Doubtful Receivables to Sales (%)



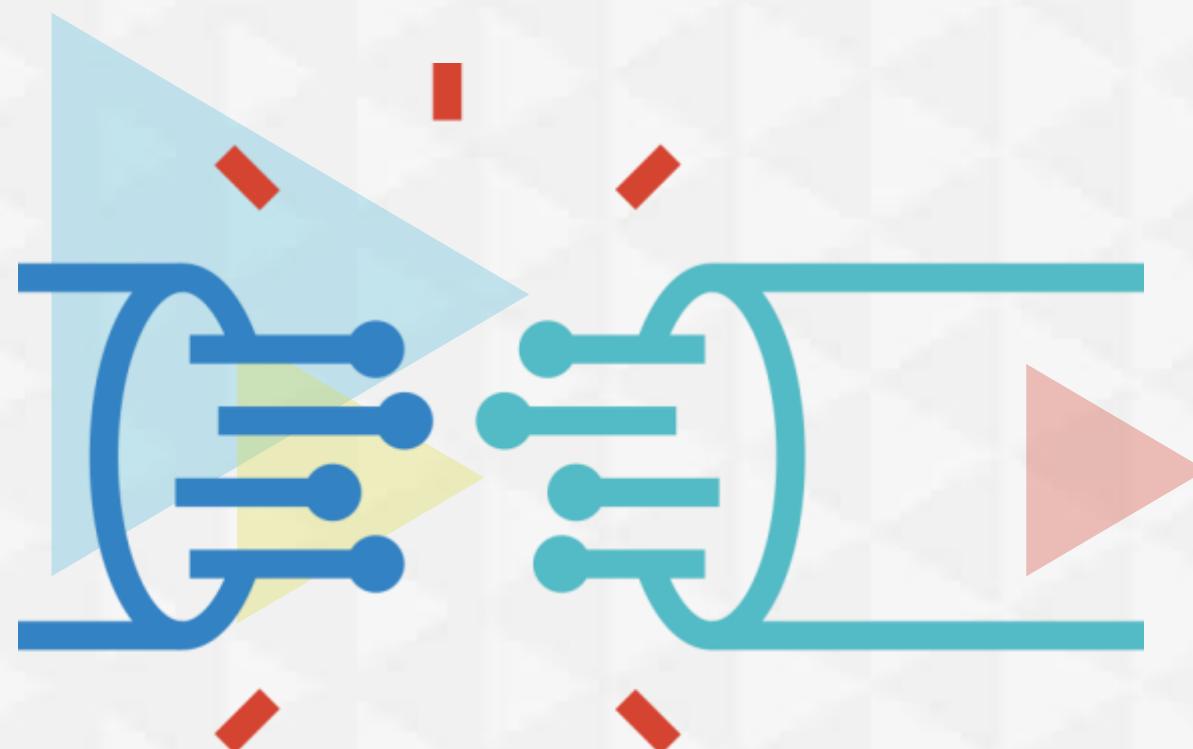
## Commercial Cost to Sales (%)



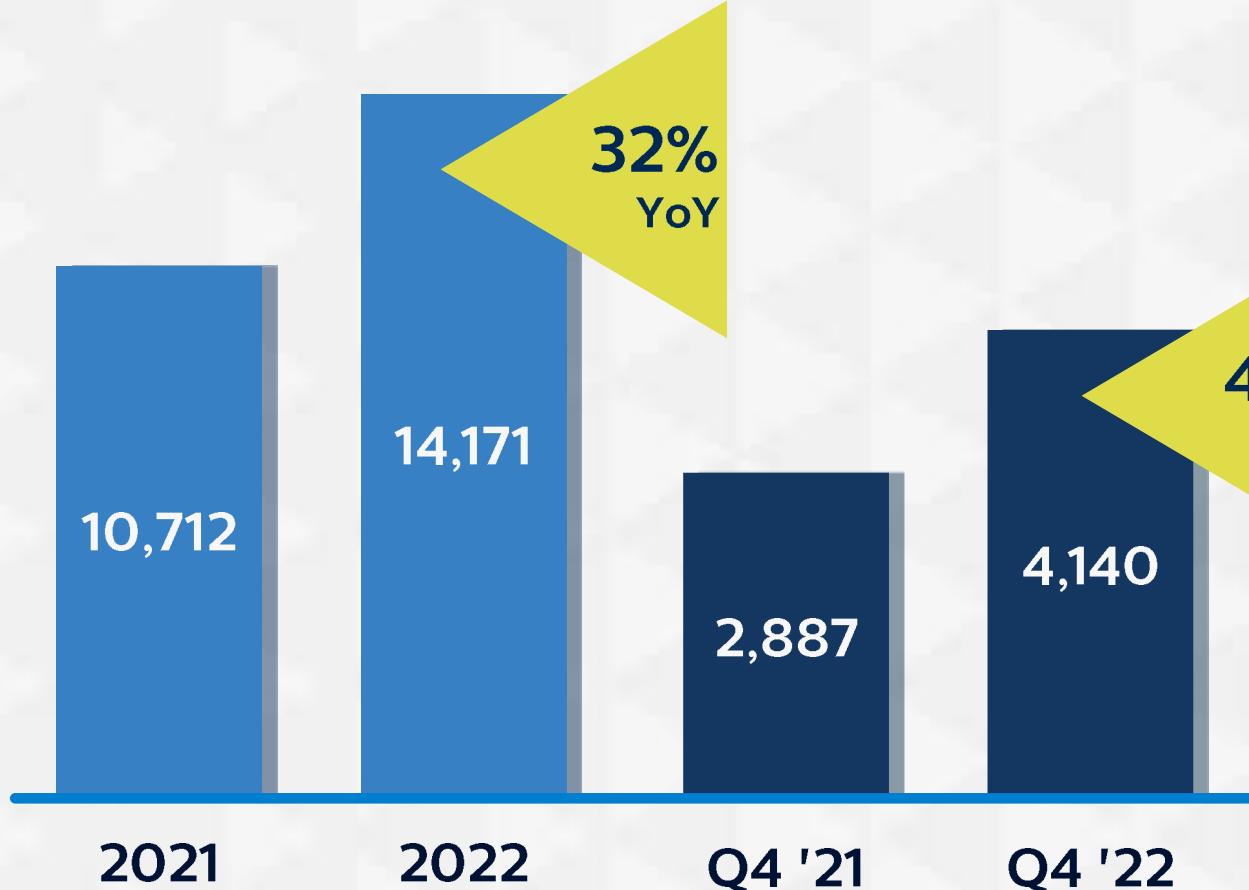
# Business Lines



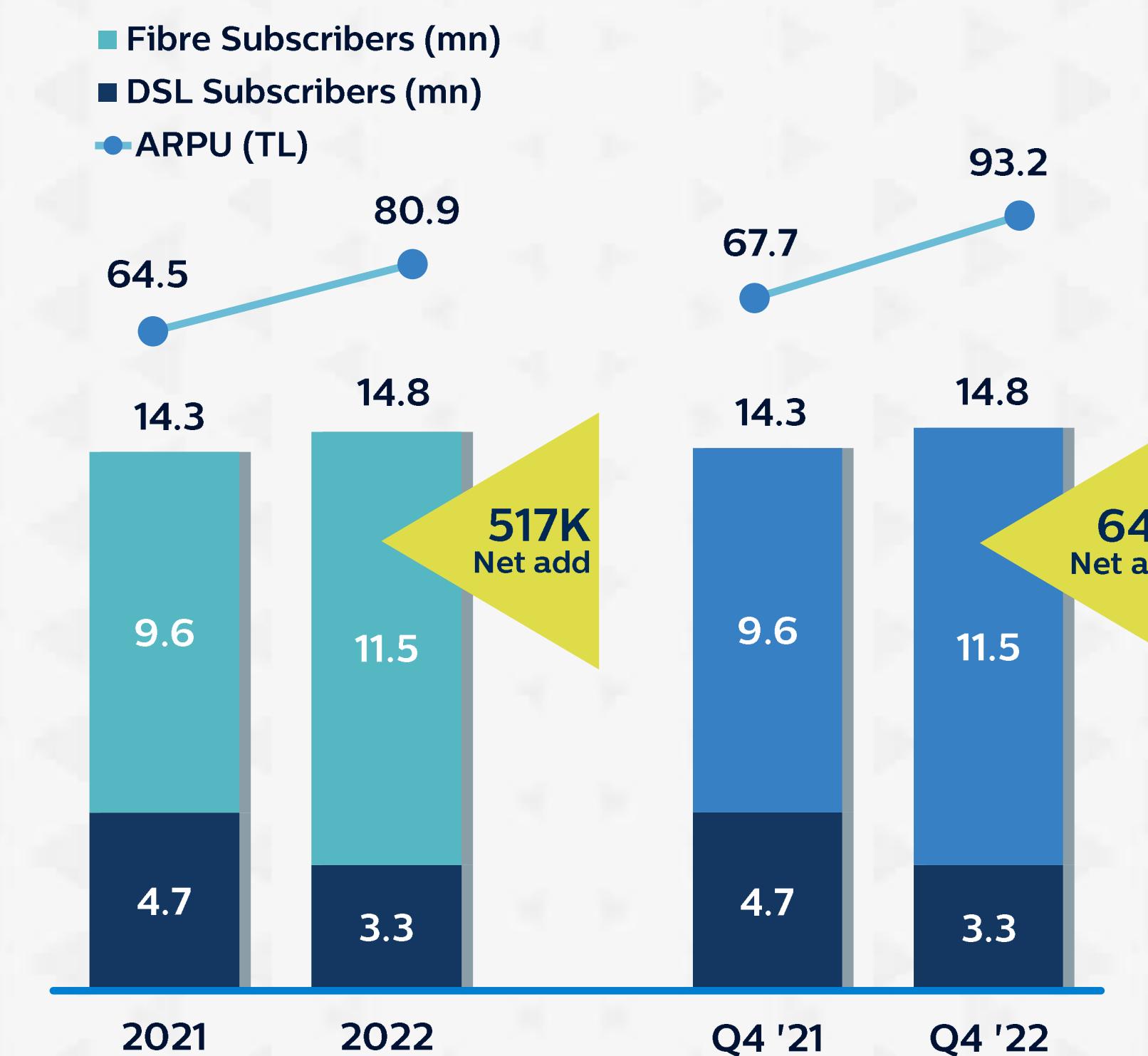
# Fixed Broadband Performance



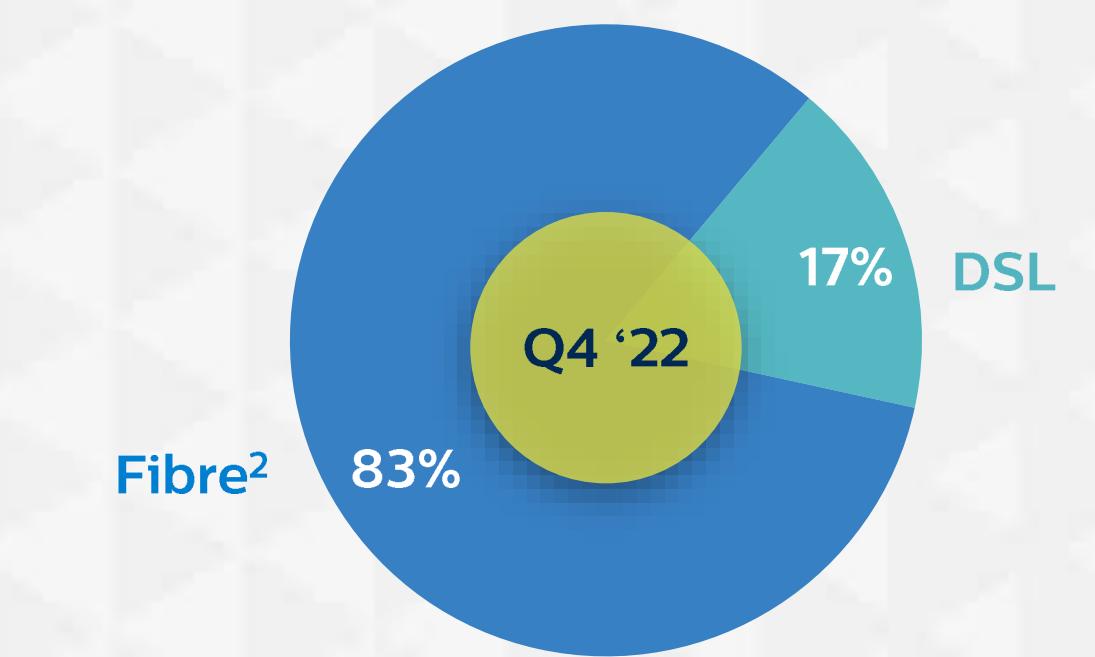
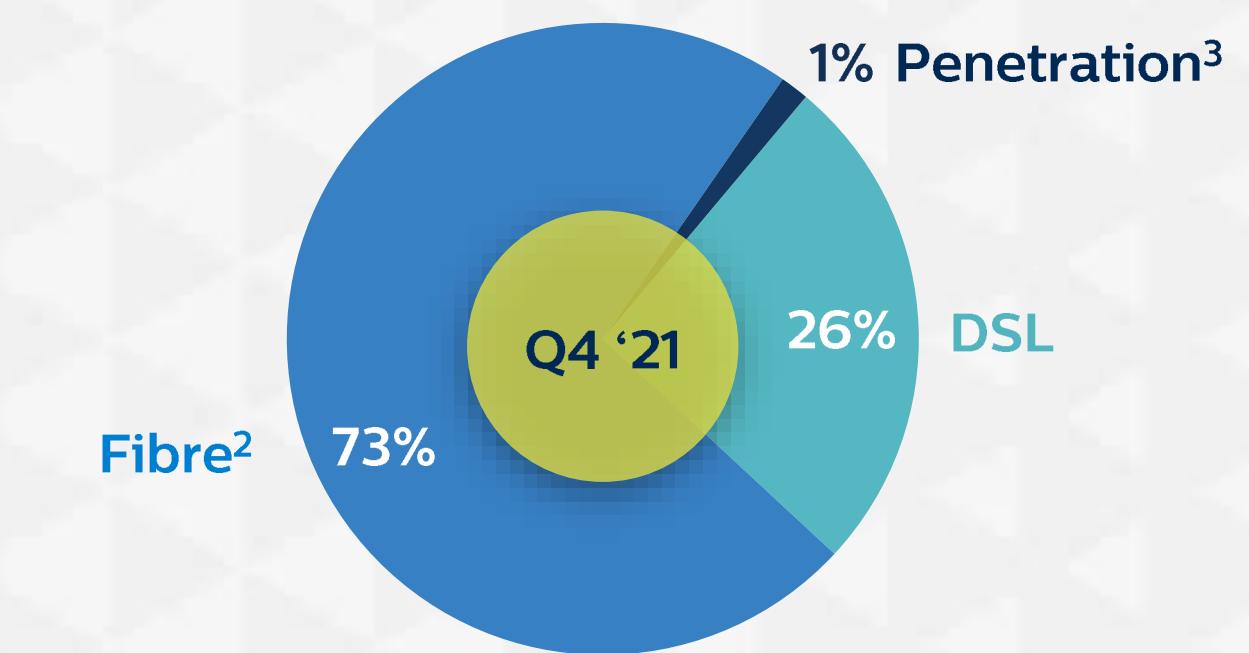
## Fixed Broadband Revenue (TL mn)



## ARPU & Subscribers



## Subscriber Breakdown<sup>1</sup> (% of Subscribers)



- (1) Retail only
- (2) Fibre subscribers include FTTH/B & FTTC subscribers
- (3) Customers acquired through penetration campaigns

# Extensive Fibre Network

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## Türk Telekom Fibre Network

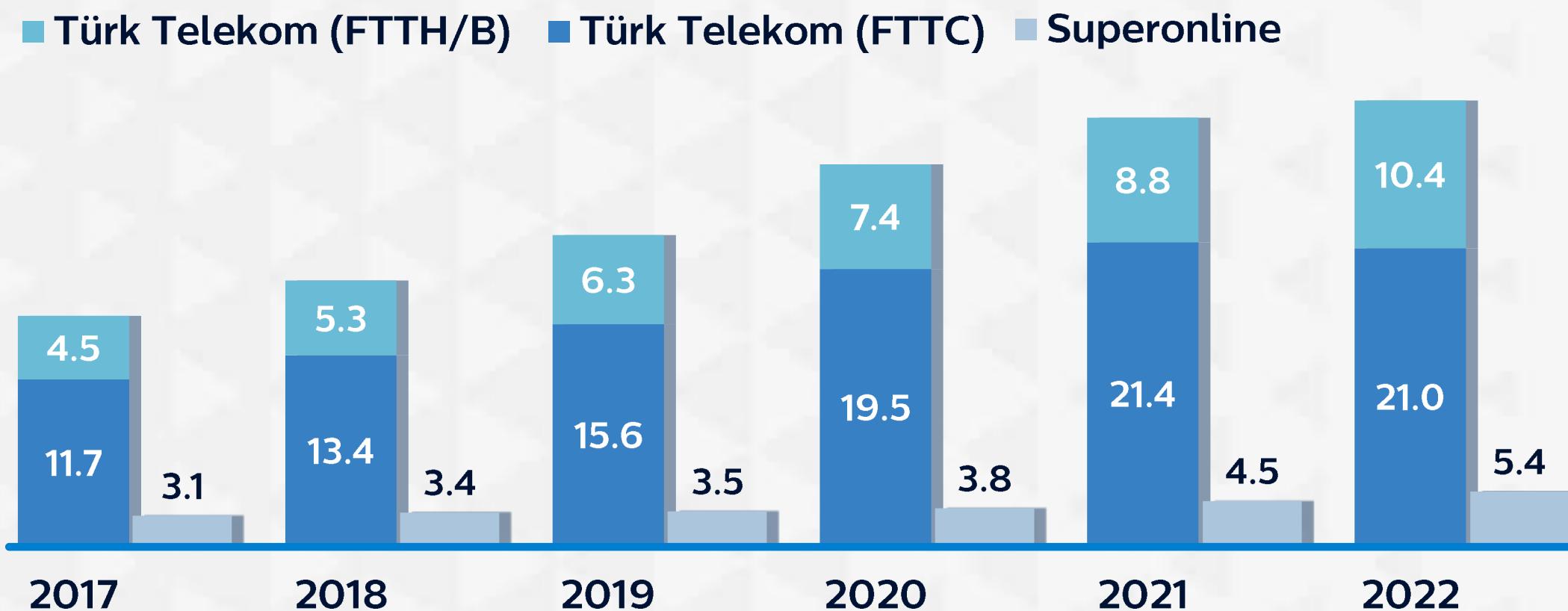


## Superonline Fibre Network



- ▶ Presence in 28 cities of Türkiye
- ▶ 60K fibre km rollouts
- ▶ Wholesale customer of Türk Telekom

## Fibre Homepass (mn)



Turkcell data is based on Turkcell's own publications.

## Fibre Subscribers (mn)



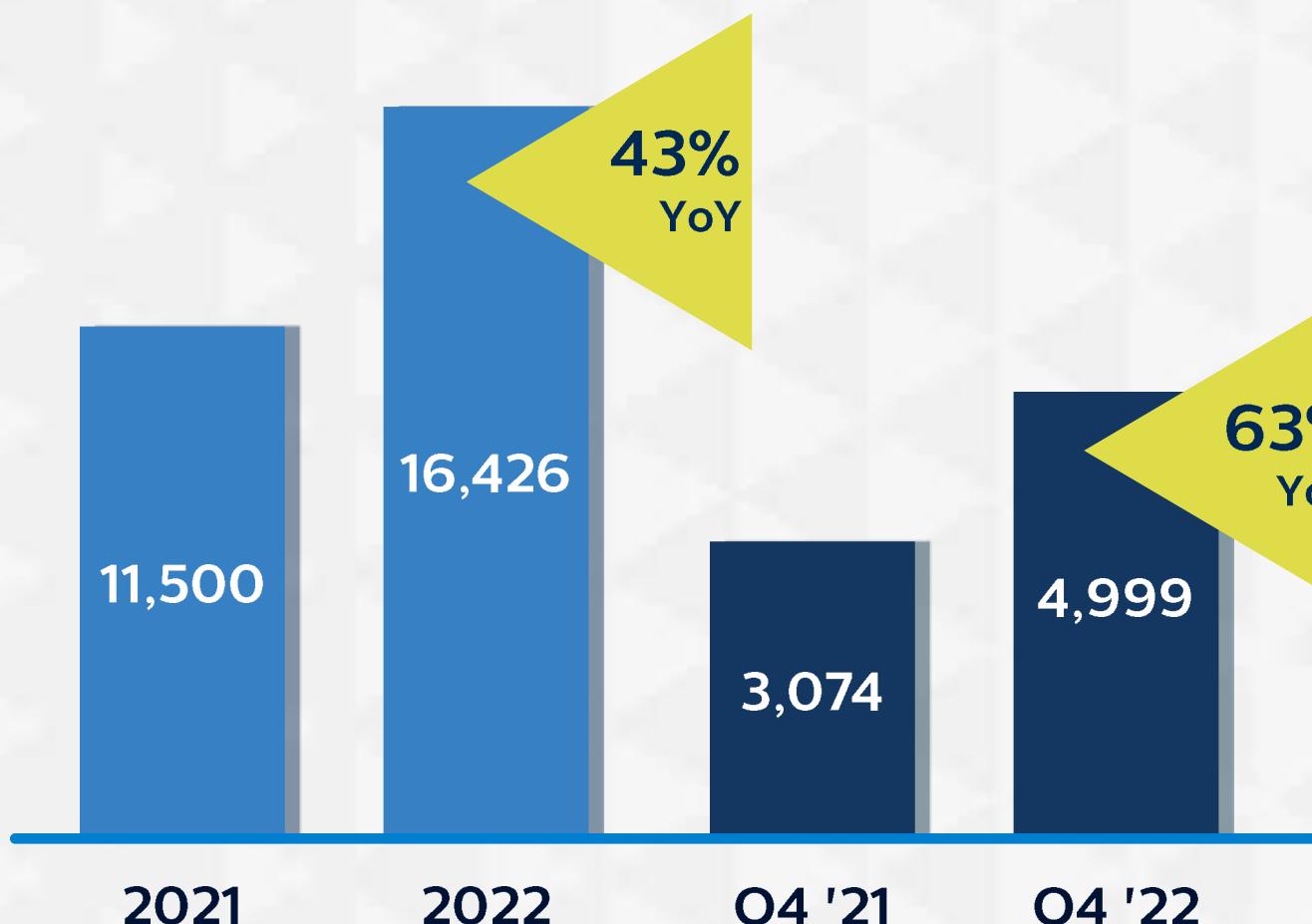
Fibre subscribers include FTTH/B & FTTC subscribers.

- ▶ Unrivalled fibre network
- ▶ Strong prospects for monetisation
- ▶ Best placed to benefit from move towards higher connection speeds
- ▶ Well-equipped to support 5G/small-cell deployment

# Mobile Performance

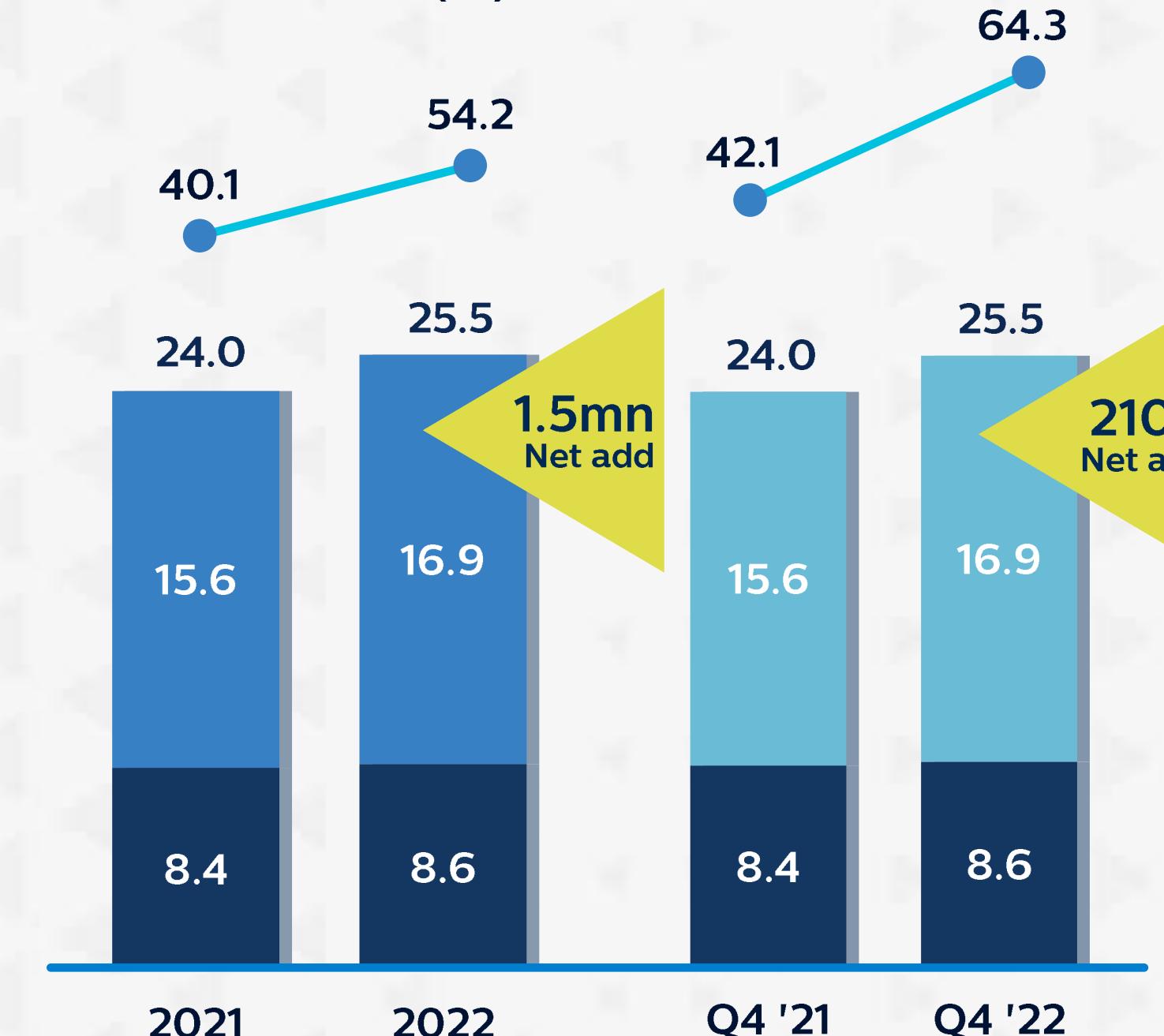


## Mobile Revenue (TL mn)



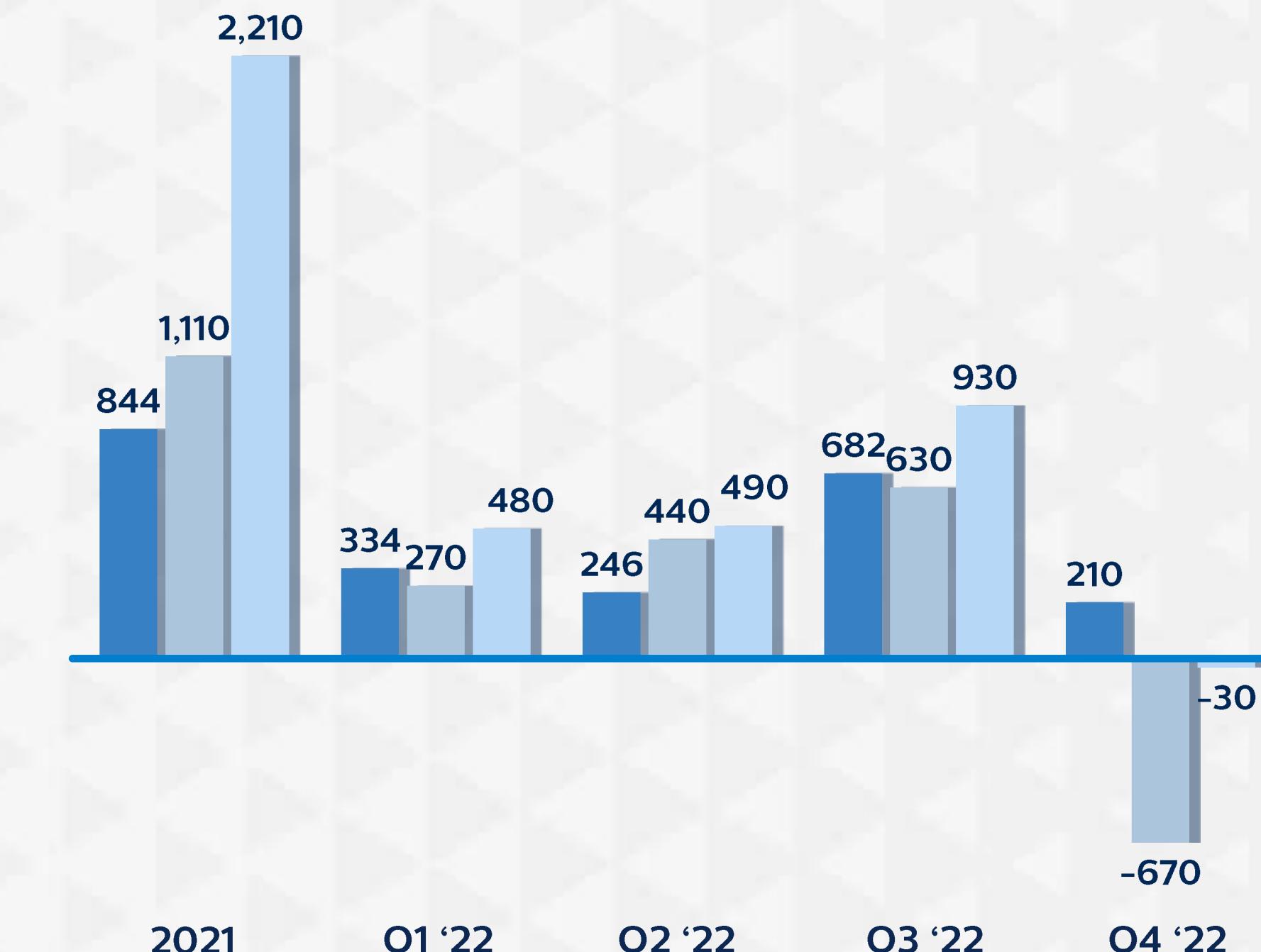
## ARPU & Subscribers

- Postpaid (mn)
- Prepaid (mn)
- Blended ARPU (TL)



## Net Subscriber Additions (thousand)

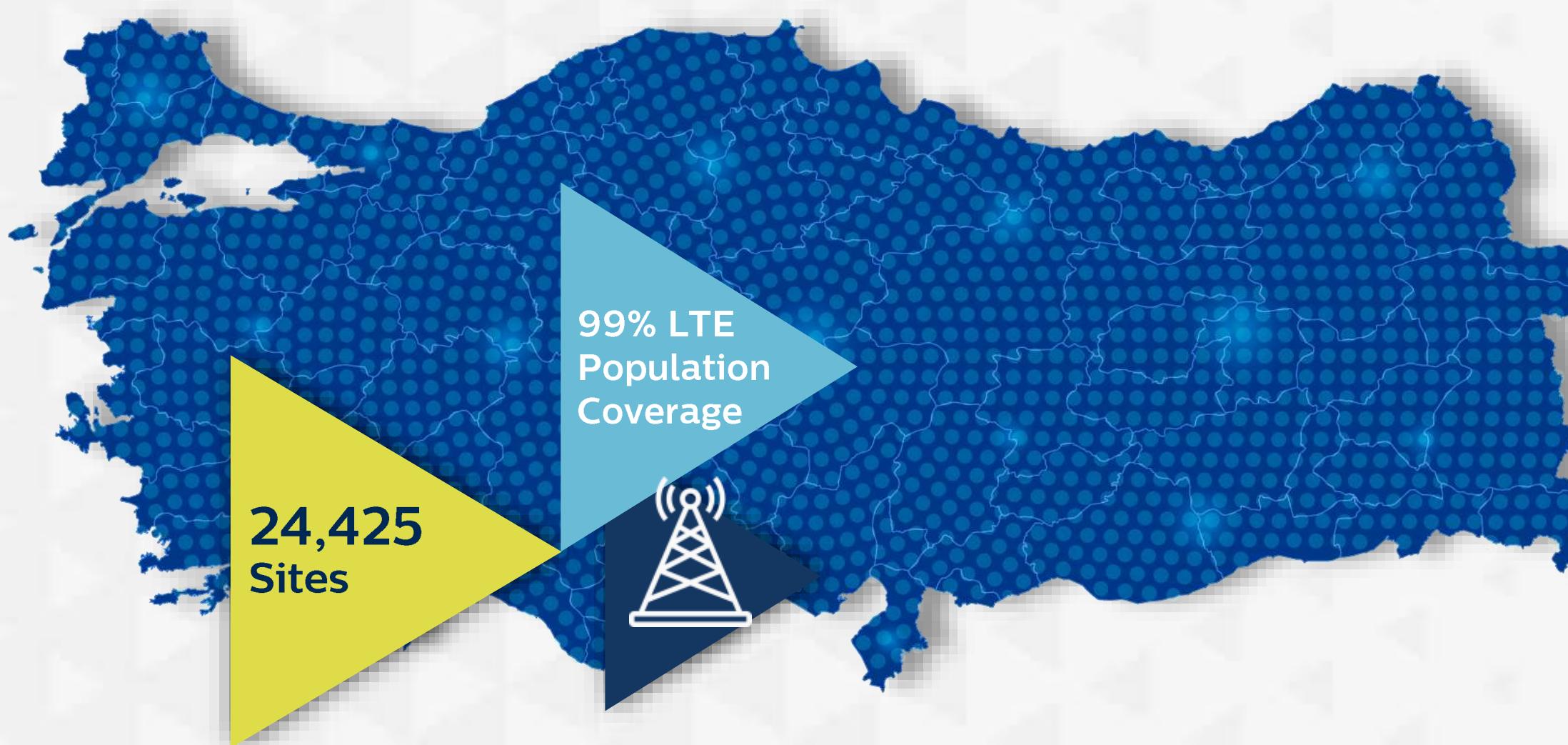
- Türk Telekom
- Vodafone
- Turkcell



Source: ICTA, Türk Telekom

# Mobile Network

## Extensive Network Coverage

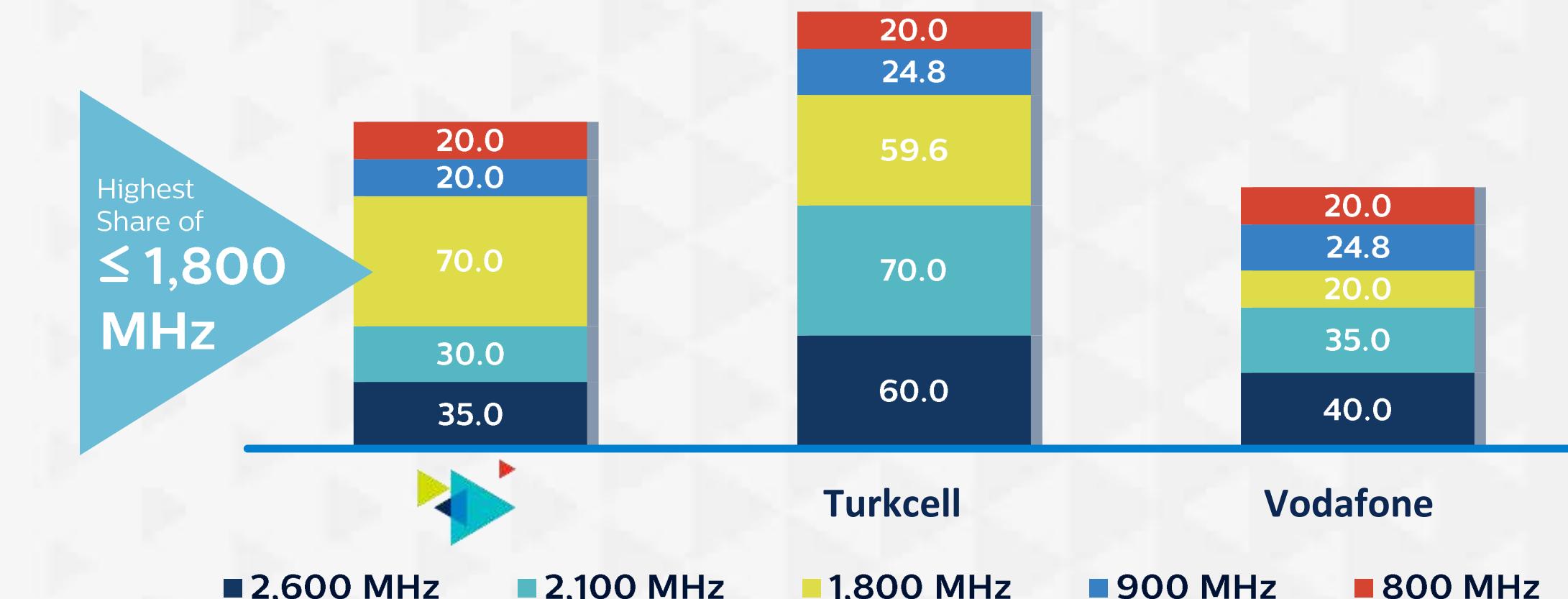


  
**97%**  
coverage

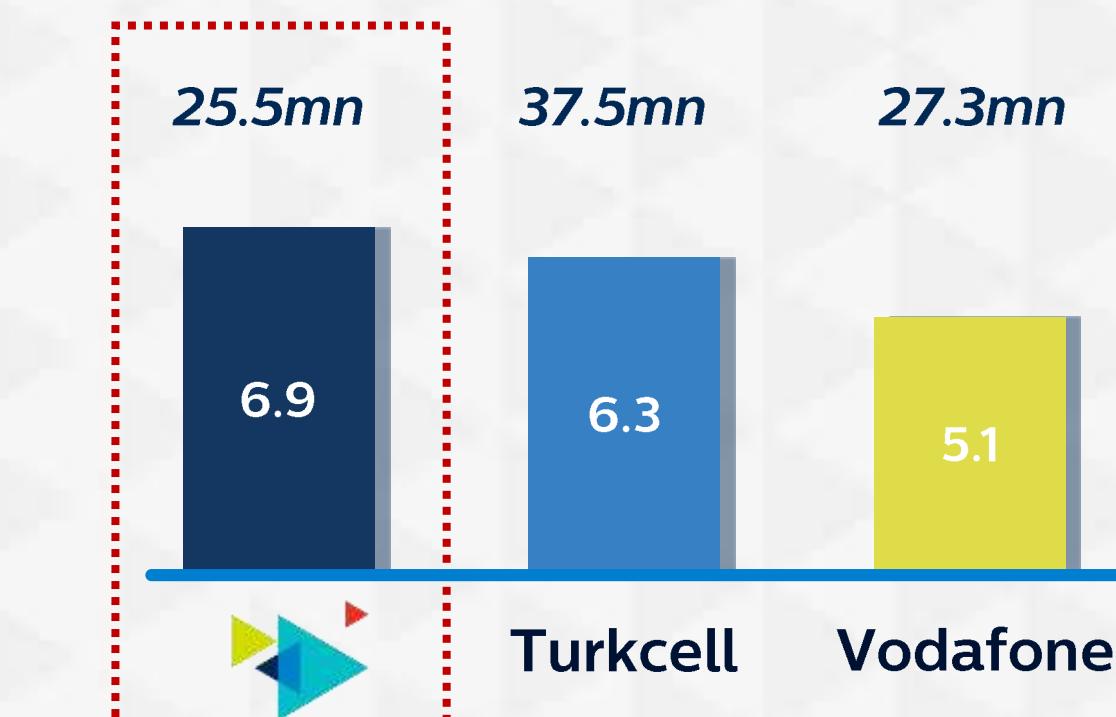
  
**99%**  
coverage

  
**Getting ready for 5G**  
via ongoing studies by  
Argela and  
Türk Telekom on RAN  
slicing, NFV and SDN

## Superior Spectrum Allocation



## Highest Spectrum Capacity Per Subscriber (MHz/Subscriber)

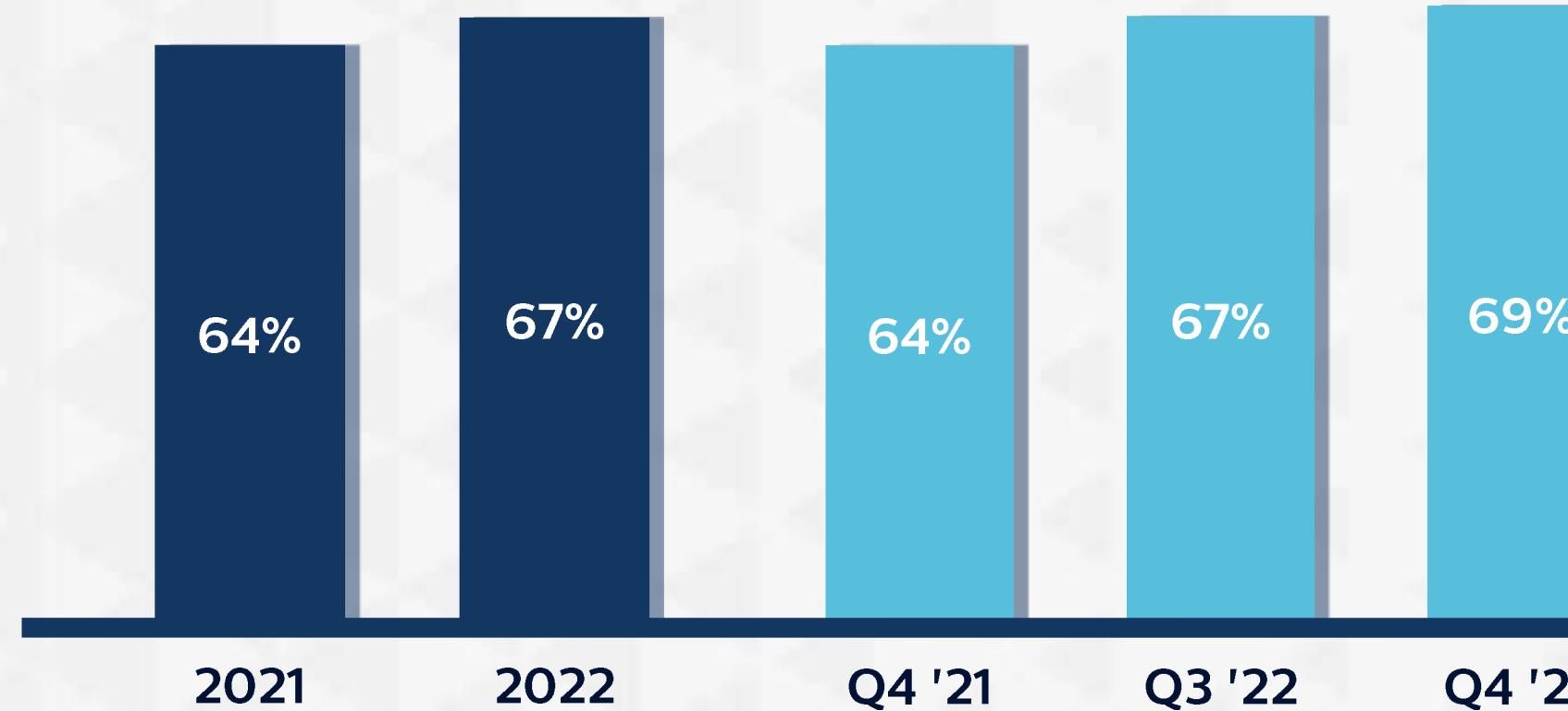


Mobile subscriber numbers are from the Q4 '22 ICTA report.

# Mobile Data

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**Data Revenue**  
(Mobile service revenue share)



**Avg. Monthly Mobile Data Usage**  
(GB per LTE user)



# TV Performance

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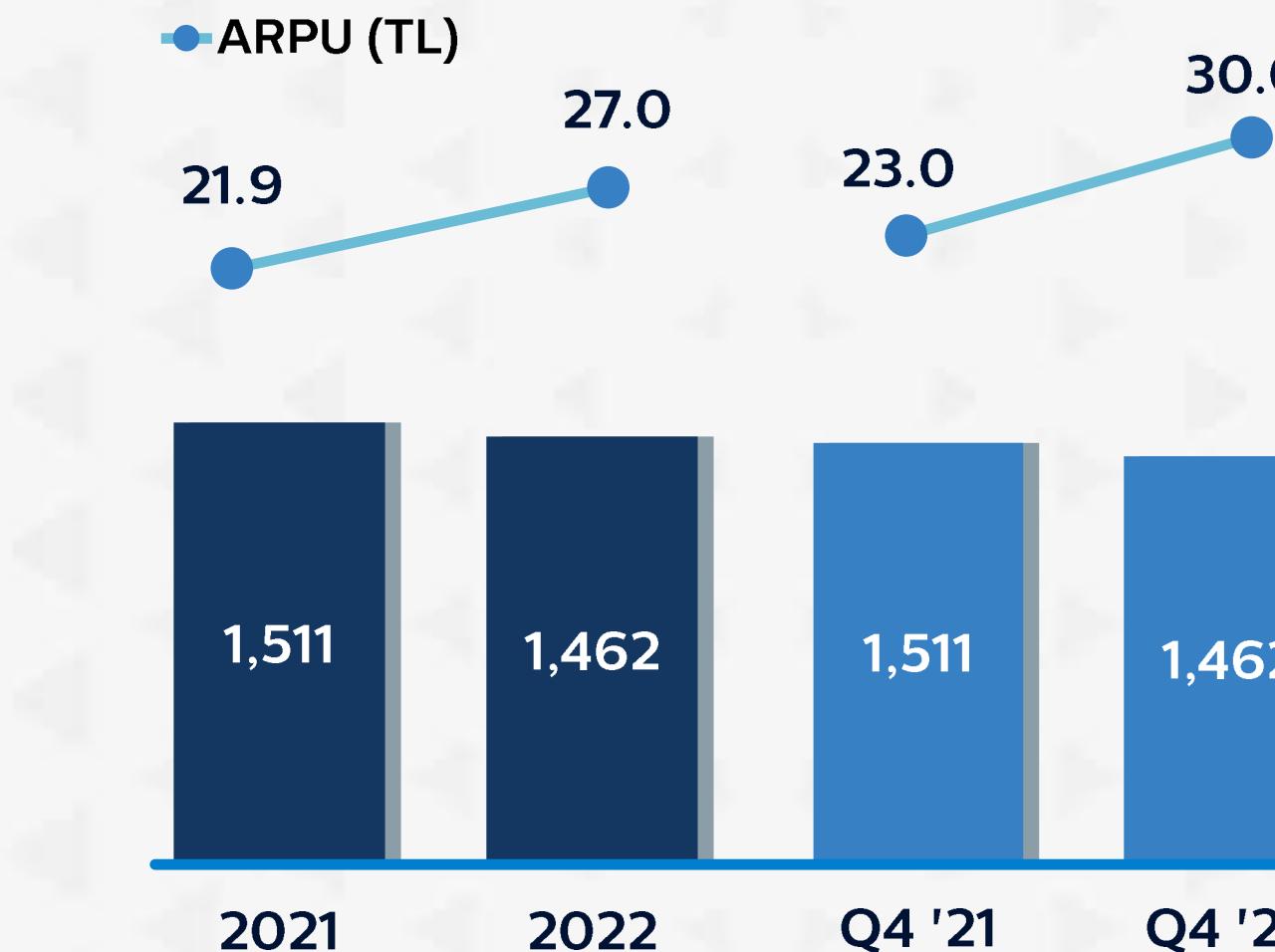


**TV Revenue**  
(TL mn)



## Tivibu Home Subscribers

('000)



## Tivibu GO Subscribers

('000)



## Platform

### IPTV

### DTH

### Web TV

### Smart TV

### Mobile TV

## Content

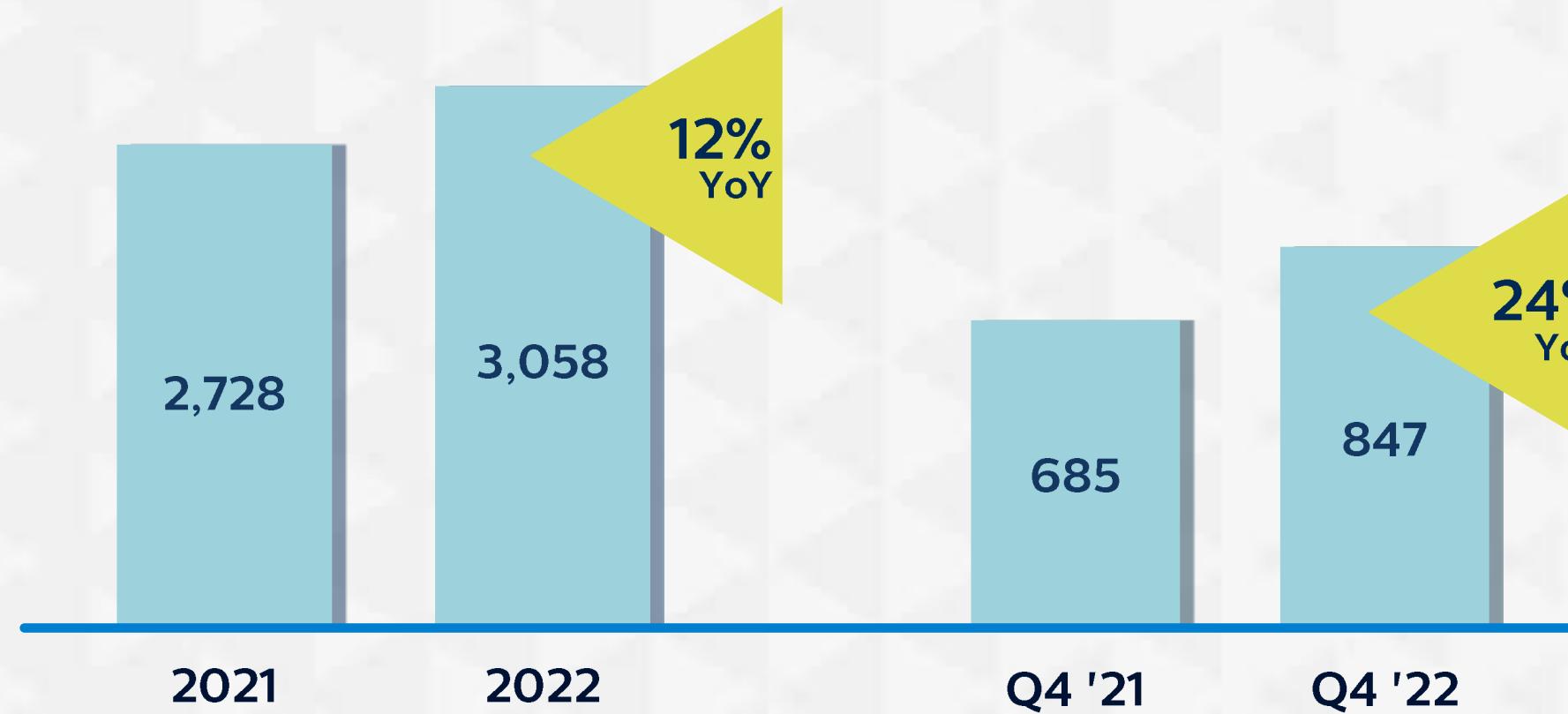
- ▶ NBA
- ▶ Belgian Pro League
- ▶ Basketball Champions League
- ▶ FA Cup
- ▶ CEV Women's Champions League
- ▶ Formula 1 & MotoGP
- ▶ Euroleague
- ▶ ATP Masters
- ▶ Bundesliga & Bundesliga 2
- ▶ 5 In-house Sports Channels
- ▶ La Liga
- ▶ Kids, Movie, TV Series, Documentary, Life and Sports Channels
- ▶ Spanish King's & Super Cup
- ▶ Serie A
- ▶ +9,000 on demand assets

# Fixed Voice Performance

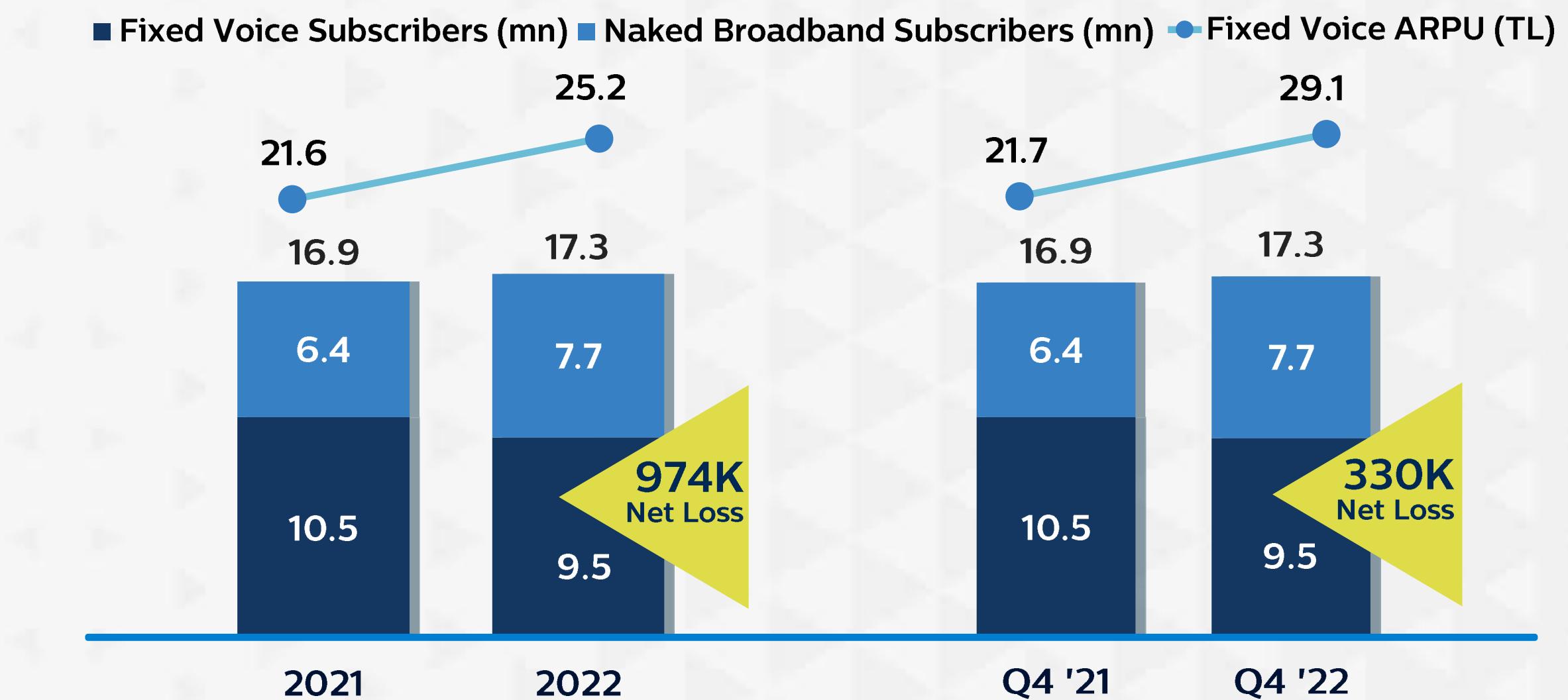
22



## Fixed Voice Revenue (TL mn)



## Access Lines and ARPU



## Sales shifting to nDSL

Focusing on nDSL in new acquisitions: guiding new subscribers to nDSL packages rather than WLR.

With our new strategy;

- ▶ Fixed voice subscriber base is expected to contract by 675K in 2022.
- ▶ No impact on consolidated revenues: < TL 25 mn revenue will travel from FV to FBB.
- ▶ Total of TL 190 mn Capex savings expected for a 3 year period.

# Corporate Data

## Corporate Data Revenue (TL mn)



### Conventional Corporate Data Services

Customer-oriented, integrated communication solutions

Cloud Services, Metro Ethernet, TT VPN, Leased Line



### Data Centre and Cloud Services

Secure, accessible services at high speeds with back up infrastructure in internationally certified data centres

Server hosting, rental, cloud server, storage, backup, cloud replication & backup, traffic forwarding, e-mail, e-work, 3 centres: İstanbul Esenyurt (8.7K m<sup>2</sup> white area), Ankara Ümitköy (2.5K m<sup>2</sup> white area) and İstanbul Gayrettepe (1.5K m<sup>2</sup> white area).



### Cyber Security Services

Managed & shared security services, cyber security centre, dedicated security services

DDoS, DDoS7+, Firewall, Active Defense (IPS), Advanced Threat Prevention (APT), Web Firewall (WAF), 24/7 Monitoring/Testing/Advisory, Attack and Phishing Simulations



### Professional Services and New Generation Cities

End-to-end integrator services that support digital transformation journeys  
Safe, sustainable and next-generation solutions for smart city projects

# TT Payment & E-Money Services

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TTPayment<sup>1</sup> is a licensed payment and e-money institution that provides services since 2013.

Our vision is to become the biggest solution partner for all payment needs of our customers with safe, easy, fast, innovative products & services that lead digital transformation.

## Mobile Payment

- Türk Telekom provides payment method services exclusive to its mobile customers.
- Contracted merchant payments are reflected to the mobile invoice or deducted from the balance without the need for a credit card or cash.
- Both postpaid and prepaid customers benefit.

### TT Payment in numbers

- Number of unique users up 12%
- Transaction volume up 267%,
- Revenue up 58%.

TT Payment revenues are set to expand with Pokus.

## Institutional Bill Payment

- Fast and secure payments of electricity, water, natural gas, telephone, GSM operator and other bills at Türk Telekom Stores/Application.

## E-Wallet & Prepaid Card: Pokus

- A fast/easy-to-use digital wallet application with a user-friendly interface that provides banking services.
- App-connected, contactless and worldwide prepaid card with Mastercard scheme.
- Operator independent.

Trading Volume  
(TL bn)



Revenue  
(TL bn)



2016

TT Payment became a member of ÖDED\*

2013

TT Payment was established in April 2013 as a 100% subsidiary of TT Mobil and TTNET.

2017

Acquired payment services license from BRSA

2019

Got e-money institution license from BRSA

2020

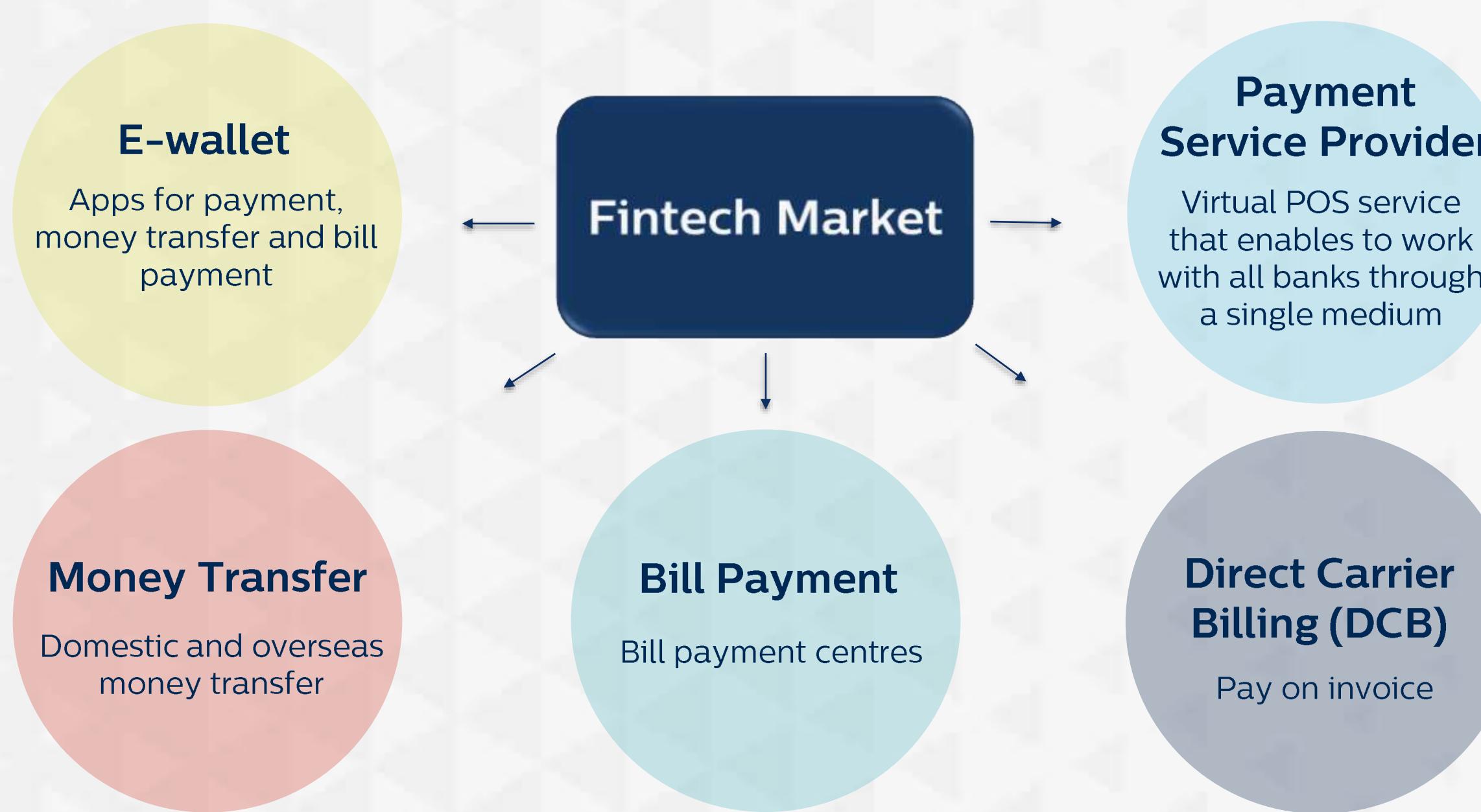
Started collection services for all corporate invoices from dealers

2021

Launched prepaid card and mobile wallet products

\* Payment and Electronic Money Association

# Turkish Fintech Market

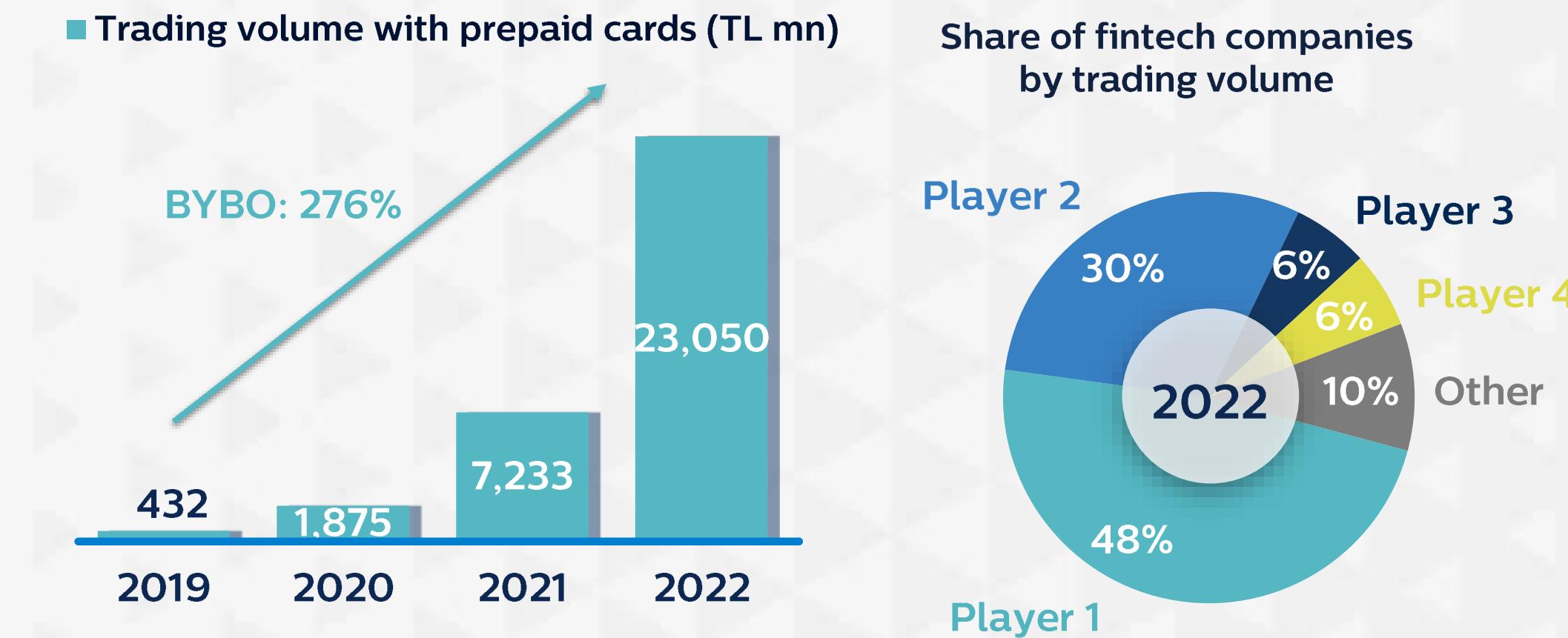


## Prepaid Card Market – 2022

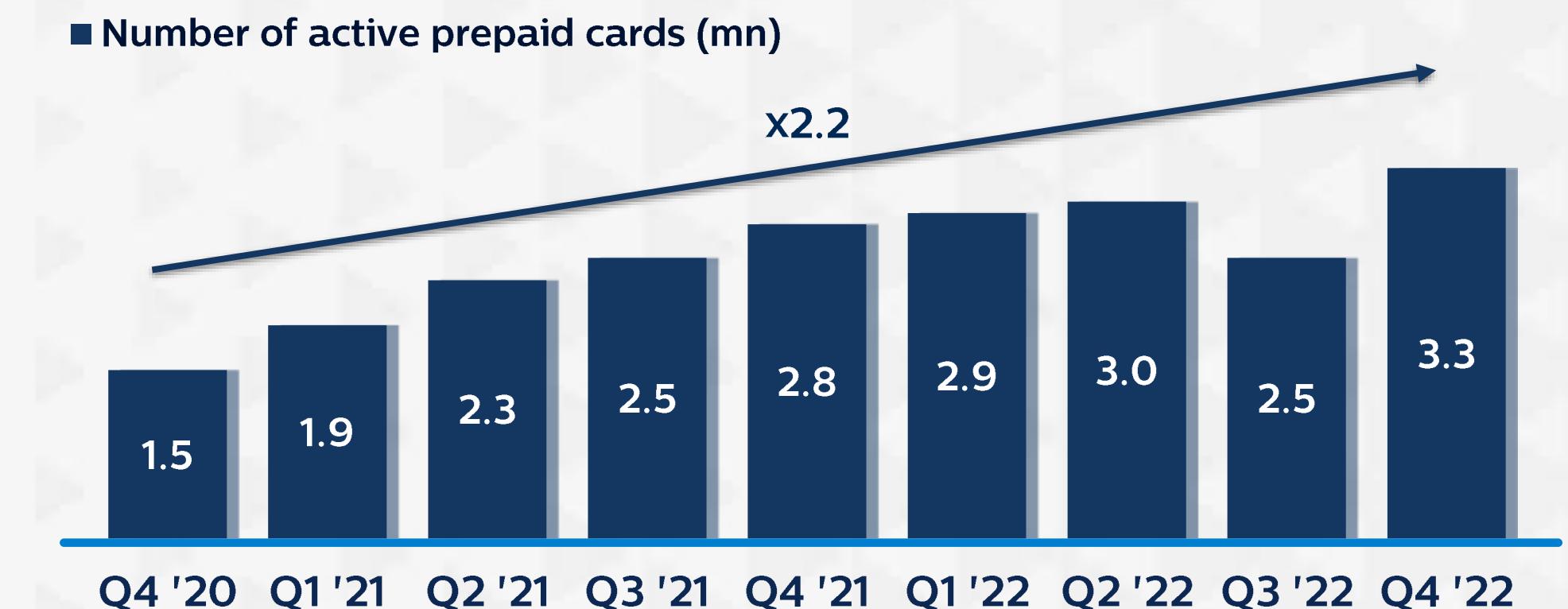
- ▶ Europe's largest card market.
- ▶ Of the total cards, 169 mn was debit cards, 99 mn was credit cards and 72 mn was prepaid cards.
- ▶ The prepaid cards market grew 25% YoY in total number of cards.
- ▶ The share of Fintechs in prepaid cards is 49%.
- ▶ 64% of volume (in # of transactions) and 84% of total spending (in TL) are generated by fintechs' prepaid cards.

Turkish prepaid card market data is from BKM.

## Turkish Fintech Companies' Trading Volume



## Top 5 Players (by number of prepaid cards)



# Pokus: New E-Payment Solution



- ▶ **E-wallet application** of TT Payment + prepaid card
- ▶ Load-spend; no overdraft, **no subscription fee**
- ▶ Valid all over the world with **Mastercard** assurance
- ▶ **Easy, fast financial services** without cumbersome procedures
- ▶ App-linked, **contactless card**
- ▶ **Operator independent**
- ▶ **Money loading/withdrawal, 24/7 domestic and overseas money transfer, bill payments, spend-split transactions, P2P sending/requesting money, ready limit**

## Pokus: Roadmap and Targets

### Strategy

- ▶ Simple/digital customer experience
- ▶ Access to financial services through one application

### Synergy

- ▶ Türk Telekom technology and ecosystem
- ▶ Vast subscriber base and efficient sales channels
- ▶ Campaigns, cross-selling, retention



**Number of users** by end-2025

5 mn

**Transaction volume** by end-2025

TL 1.5 bn

**EBITDA and FCF** by end-2023

Positive

# Strategy



# Strategy Focused on Sustained Profitable Growth

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## Core Services

### Growth and digitalisation in main business lines

- Pioneer in Türkiye's digital transformation
- Strong growth and leadership in fixed broadband with focus on fiberisation
- High-quality/high-speed internet access
- Priority in gaining revenue market share in mobile
- Intensified subscription relationship with households through increased access lines and inclusive product portfolio
- Leading digital TV/OTT platform

## Efficiency

### Improving efficiency with digitalisation and new operational models

- Digitalisation and virtualisation
- Effective cost control and disciplined capital management
- Improved organisation and lean technology

## Customer Focus

### Redefining customer experience

- End-to-end redesigned and digitalised best-in-class customer experience
- Customer-oriented, agile working models
- Personalised offers and content

## New Income Areas

### Growth in new areas supporting main business lines

- Next-generation 5G solutions and international collaborations
- TV/OTT and ICT/Cloud investments
- Accessible cloud/IT/IoT services
- Large scale IT projects
- Venture capital initiatives
- Fintech solutions



## Broadband

- ▶ Increase fixed broadband penetration
- ▶ Efficient use of diversified sales channels
- ▶ Upsell to higher speeds



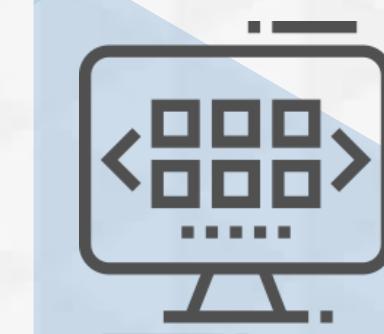
## Fixed Voice

- ▶ Synergy offers & cross-sells
- ▶ Protect fixed voice position via cross-sell offerings



## Mobile

- ▶ Prioritise revenue market share
- ▶ Encourage data usage
- ▶ Maximise value



## Pay TV (Home and GO)

- ▶ Leverage underpenetrated market and increase market share
- ▶ Improve customer experience
- ▶ Upsell existing subscriber base to high-content packages

# The Readiest Operator to 5G



## Smart Cities

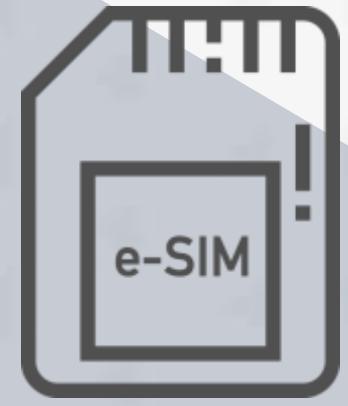
14 smart cities with Türk Telekom



## Media & Entertainment

Türkiye's first 5G live match via 360 degrees VR technology

World record with >2.92 Gbps speed



## Vehicle-to-Everything (V2X)

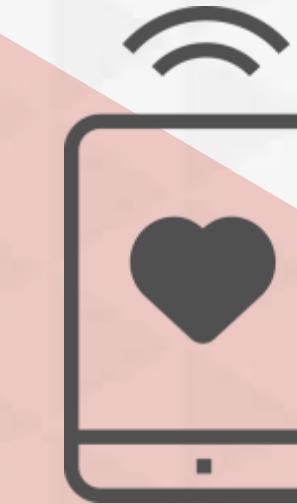
E-sim  
E-Call



## Industry 4.0

Smart factory solutions to minimise errors in industrial applications and maximise production & efficiency

Digitalisation  
B2B Solutions



## E-Health

LIGHT  
Mobile EKG  
Smart Organ Carrying Units



## Cloud Network

SDN (Software-Defined Networking)  
NFV (Network Function Virtualisation)  
Network Slicing

# Investing in Future

## Türk Telekom actively participates in...



## Collaborations in next-G tech

### vRAN

Software-Based and Sliceable Virtualised Radio Access Network

Product partnership and revenue sharing with Juniper



### 5G Time Synchronisation

Cooperation with Net Insight: Product partnership, revenue sharing and discounted supply advantage



- Working with Argela for SDN & NFV based cybersecurity solutions
- Türkiye's largest cyber security service centre: provides 24/7 monitoring, consultancy and incident response services
- Türkiye's highest capacity DDoS protection infrastructure
- Best in class cloud computing solutions



- 50% of LTE base stations connected with fibre
- Work to manage the 5G network with AI technology
- Preparations at pilot 5G test networks
- First Industry 4.0 5G test in Türkiye
- Türk Telekom, Arçelik and Nokia collaboration to establish Türkiye's first private future-proof 5G wireless network
- Mobile network IT provisioning processes on the 5G path optimised using the Ericsson Dynamic Activation (EDA) platform



- Leading largest smart city projects in Türkiye with next generation projects

# Digital Channels

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Continuous expansion of digital services for **best-in-class customer experience**

**27 mn**  
Unique users  
in 2022<sup>1</sup>

**82%**  
The share of collections through digital channels<sup>2</sup>

**68 mn**  
Downloads as of 2022

**42%**  
YoY increase  
**TL uploads & invoice payments via online channels**

**Wide range of services on the Online Transactions Application:** invoice payments, TL uploads, recontracting, upselling and application for new subscriptions

**One login:** accessing all Türk Telekom products; mobile, broadband, fixed voice, TV with single login

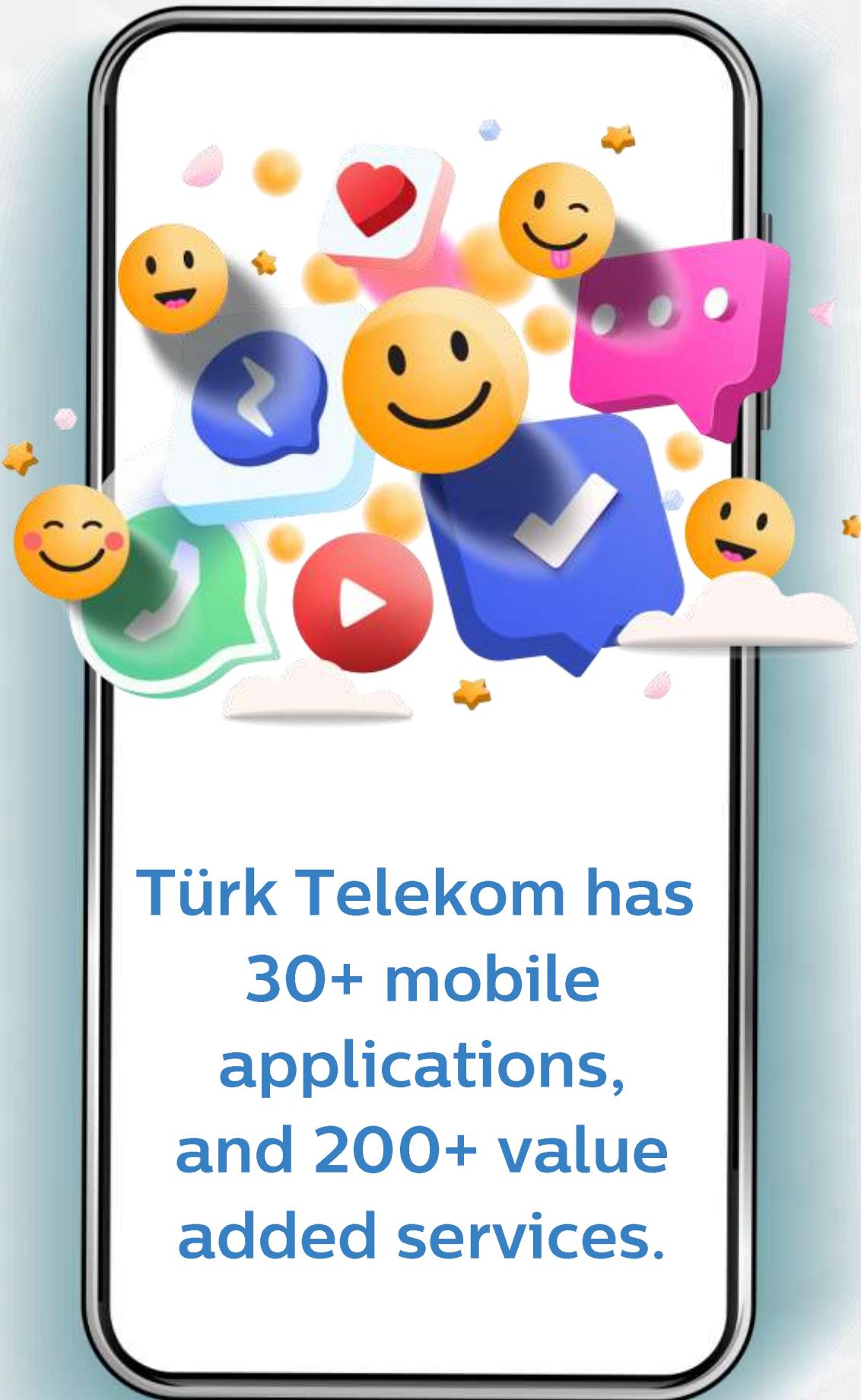


(1) Online Transaction Application 12-Month active user

(2) Share in the consumer segment

# Digital Service Portfolio

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## Türkiye's new generation TV platform:

### Tivibu GO – Launch: 2010

Türk Telekom's all-in-one, multi-screen support TV platform which provides national and exclusive linear channels, thousands of movies, documentaries, series and catchup programs

## Türkiye's enriched digital music platform:

### Muud – Launch: 2008

Türkiye's most preferred digital music platform to listen and download millions of songs and watch videos

## Türkiye's leader digital gaming platform:

### Playstore – Launch: 2011

Türkiye's first and leader digital gaming, e-pin, console games and physical gaming accessory sales platform

## Türk Telekom's employee development platform:

### Türk Telekom Academy – Launch: 2018

Education platform for Türk Telekom employees has been relaunched and now available to all Türk Telekom internet subscribers

## Türkiye's interactive education platforms:

### Vitamin & Raunt – Launch: 2008

Türkiye's biggest online education platforms: Vitamin for pre-school to high grades students, Raunt for university preparation

## Award-winning application for people with visual disabilities:

### EyeSense – Launch: 2018

People with visual disabilities can take pictures with the voice warning system using both selfie and the front and rear cameras of the phone.



## Türkiye's first smart and hyperlocal digital keyboard:

### Tambu – Launch: 2017

Türkiye's first local and customised smart digital keyboard

## Türkiye's popular online reading platform:

### e-dergi – Launch: 2017

Türkiye's online magazine and newspaper reading platform with advantageous campaigns for Türk Telekom mobile users

## Türkiye's most comprehensive security platform:

### Türk Telekom Security – Launch: 2009

Türkiye's most comprehensive and secure anti-virus and family protection service

## Türkiye's widest WiFi broadband network:

### Türk Telekom WiFi – Launch: 2006

Türkiye's widest WiFi hotspot coverage and services for Turkish Airlines flights

## Türkiye's advantageous integrated cloud platform:

### Dijital Depo – Launch: 2018

Türk Telekom's operator free new cloud storage application Digital Depo enables users to safely store photos, videos, music and all files with user-friendly design

## New E-payment solution:

### Pokus – Launch: 2021

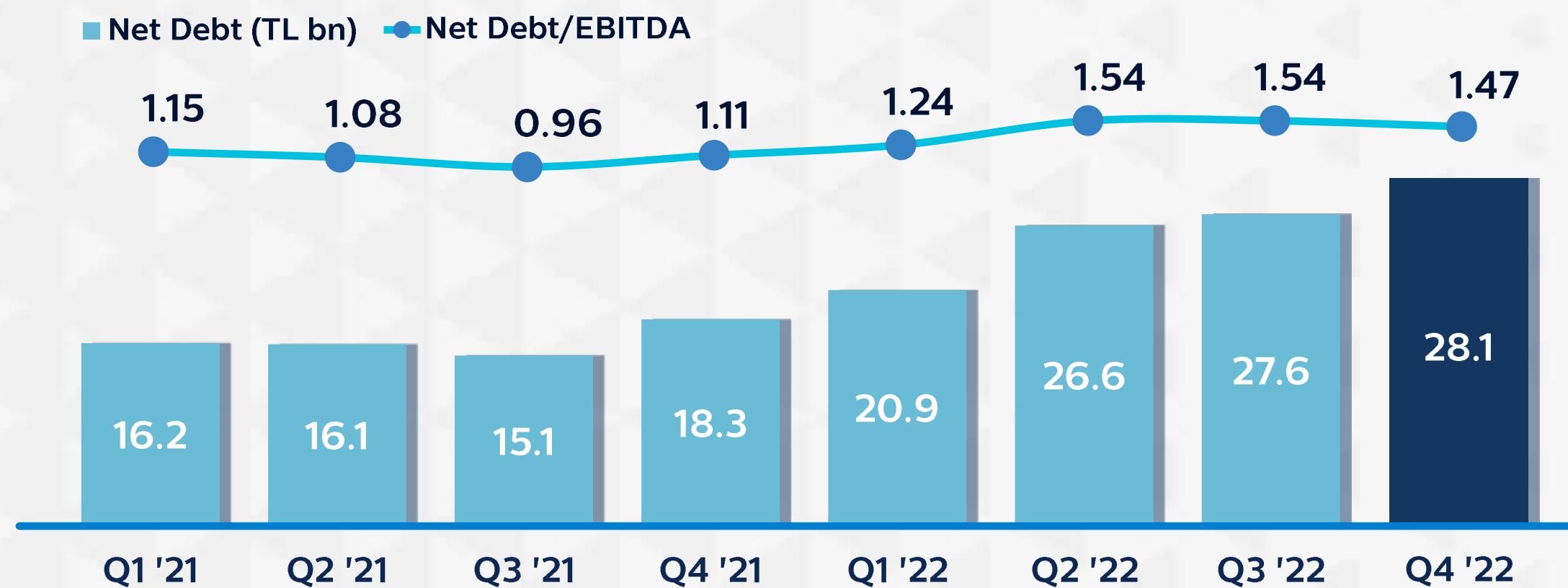
Türk Telekom's simple / digital platform that provides access to financial services through one application

# Financials



# Debt Profile

## Net Debt

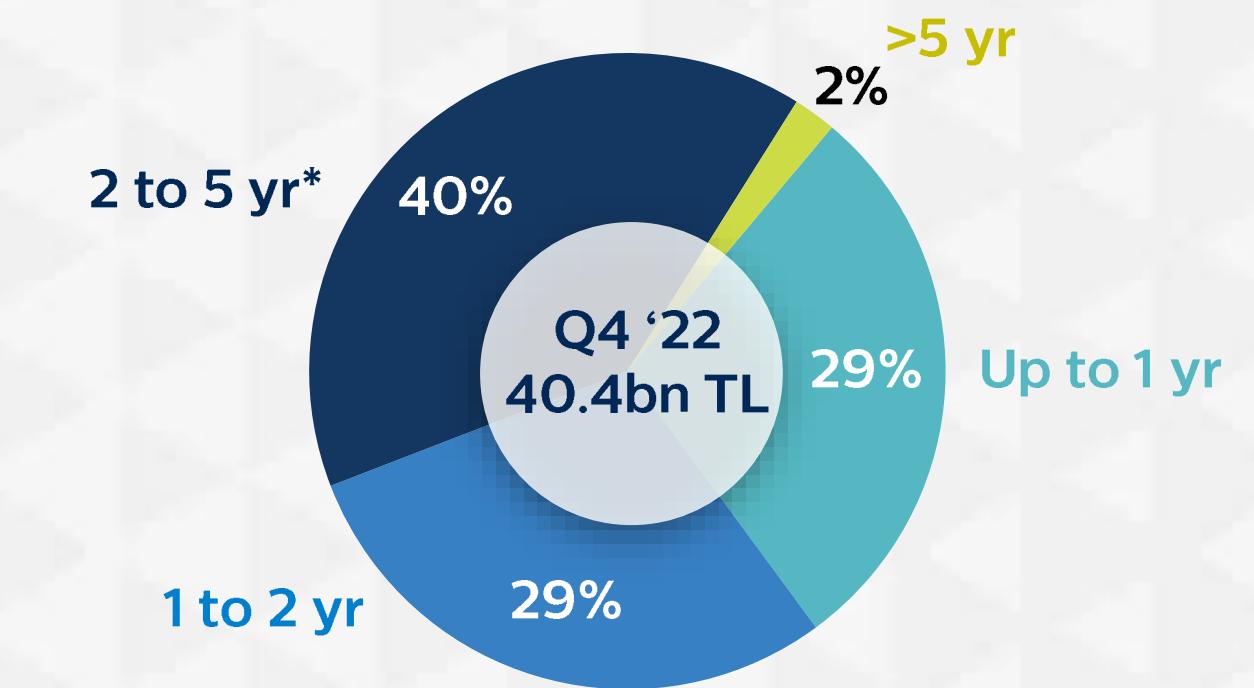


Note: Net Debt calculation includes market valuation (MTM) of Foreign Currency TL money swap transactions.

Net Debt/EBITDA calculation does not include extraordinary provisions in EBITDA calculation

Net Debt/EBITDA calculation includes fair value of Currency Protected Time Deposit included in Financial Investments.

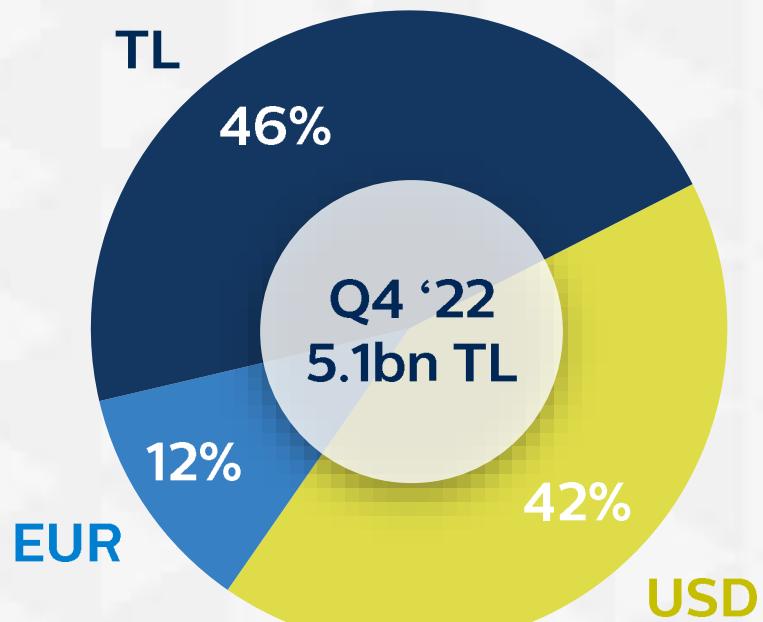
## Maturity Profile



All loans are senior unsecured.

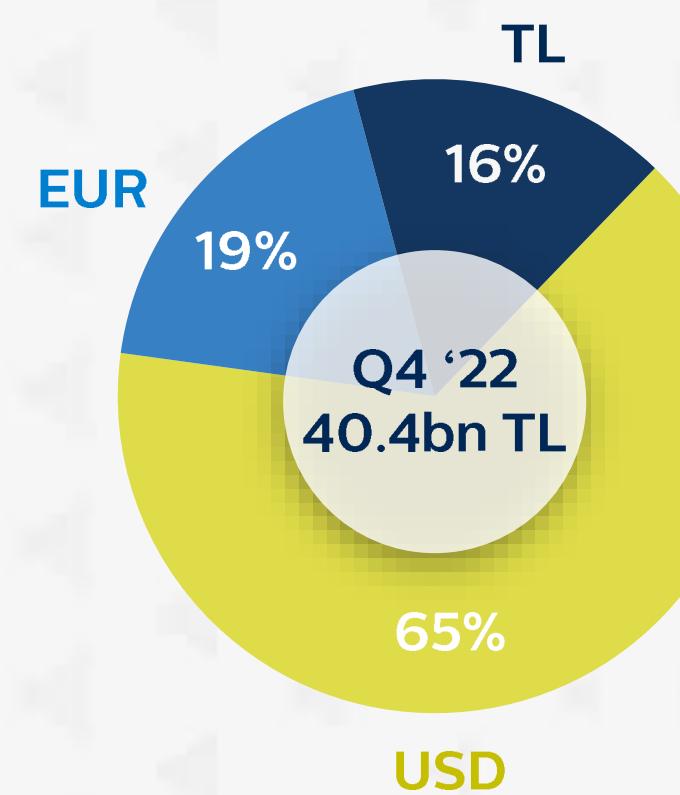
\* including 2024 & 2025 maturity bonds (USD 500 mn each)

## Cash – Currency Breakdown\*

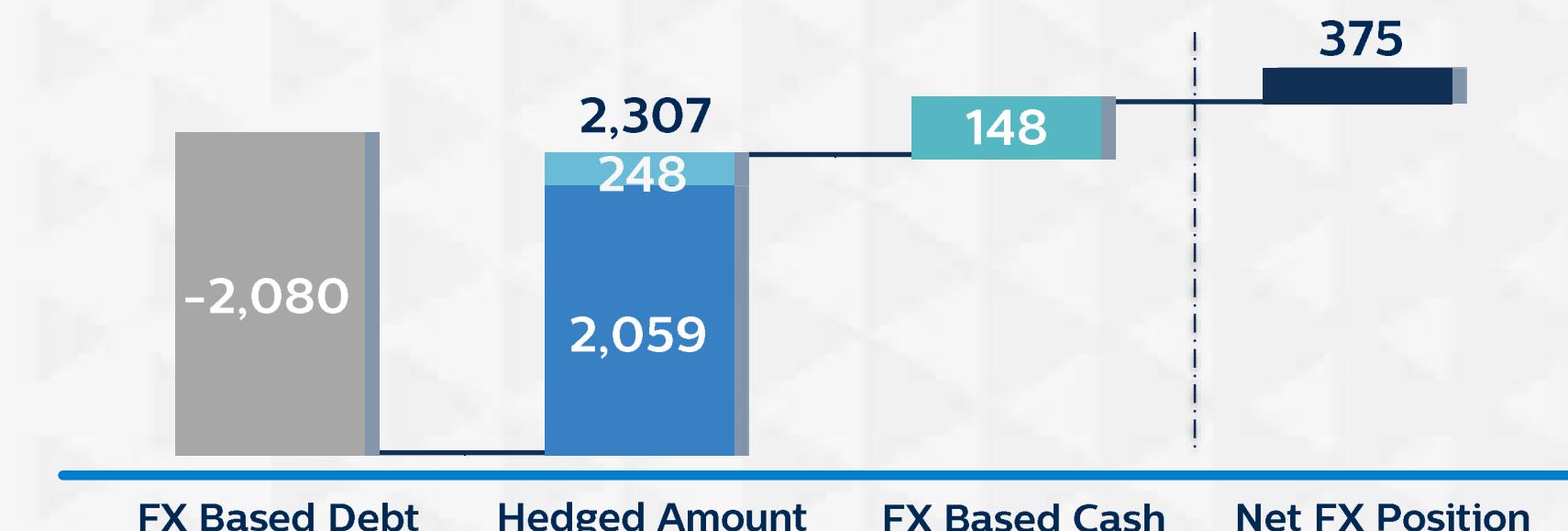


\* TL 4.9 bn worth currency protected time deposit is not included in cash.

## Gross Debt – Currency Breakdown



## Hedge – Composition of FX Position



\* FX Debt calculation includes FX financial debt (including FX lease obligations) and FX net trade payables. Hedged amount includes hedging of FX financial debt, currency protected time deposit, hedging of FX net trade payables and net investment hedge.

\*\* Currency protected time deposit included in hedged amount is worth USD 248 mn.

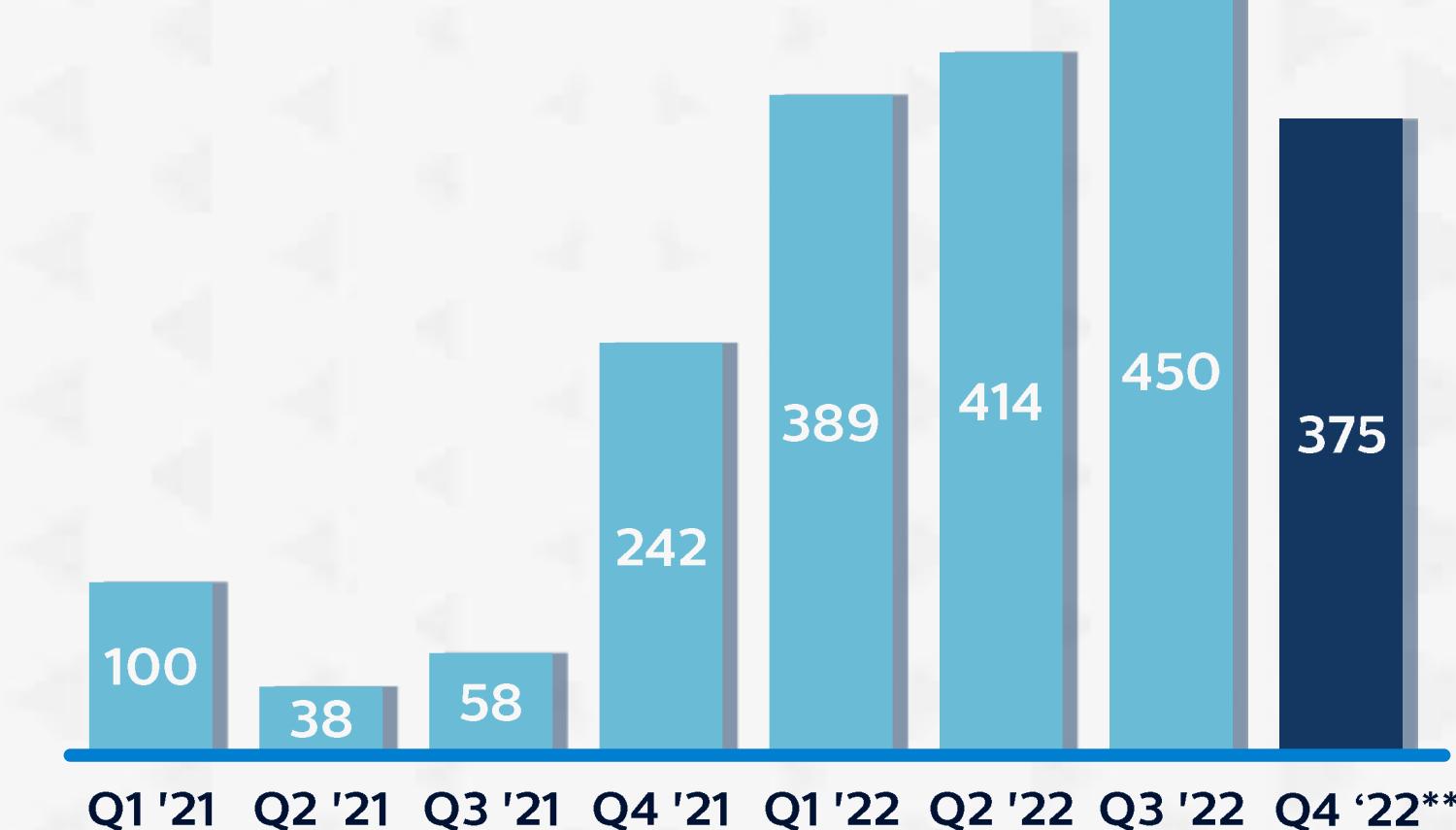
\*\*\* Excluding the ineffective portion of the hedge portfolio, mainly the existing PCCS contracts, net FX exposure would be USD 458 mn short position.

# Prudent Balance Sheet Management

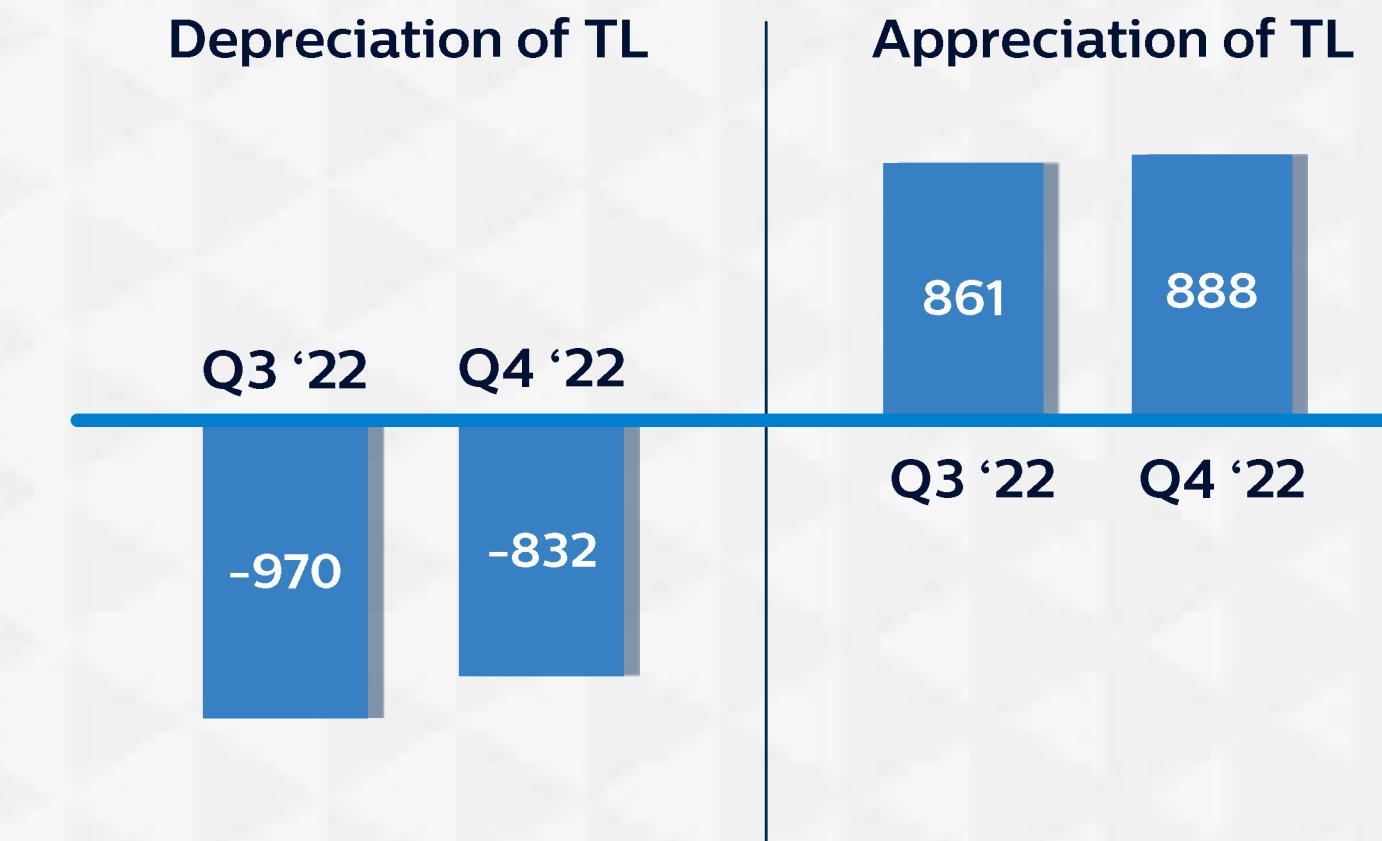
**Cash Flow\***  
(TL mn)



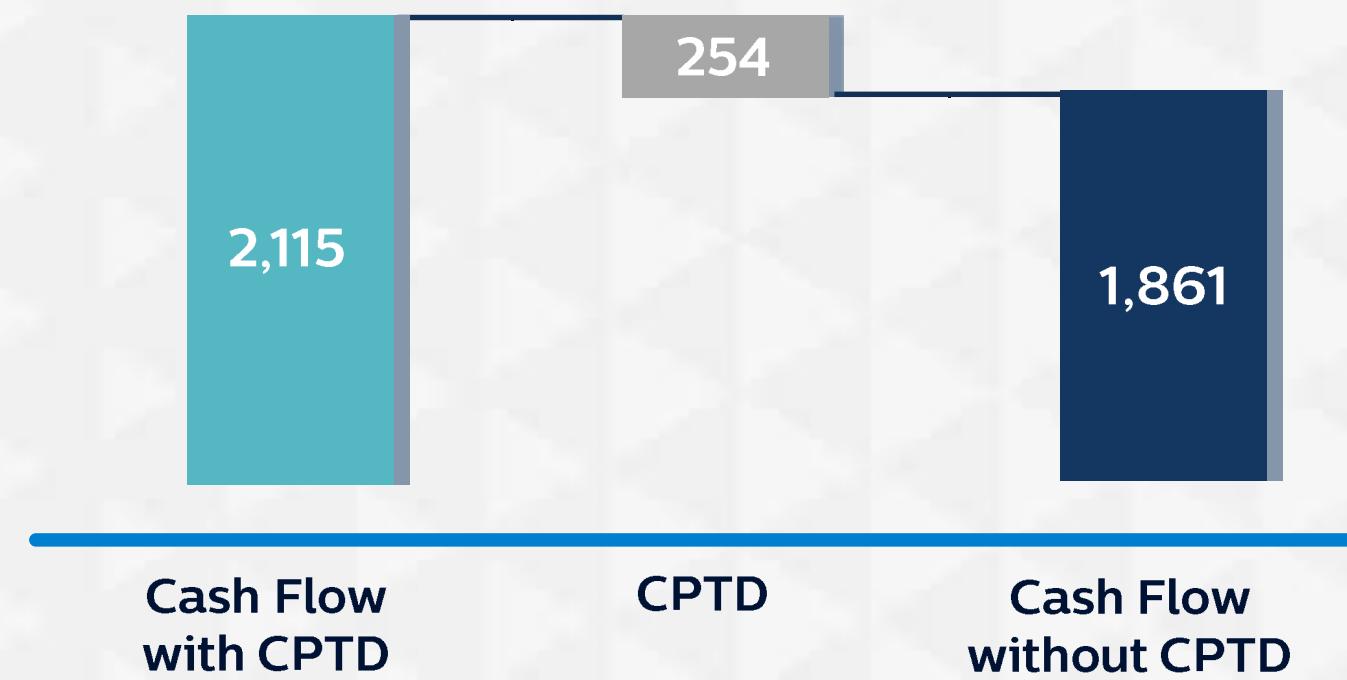
**Net FX Exposure\***  
(USD mn equivalent)



**Profit Before Tax Sensitivity**  
(TL mn, 10% change in FX rates)



**The Effect of CPTD\*\* on Cash Flow**  
(TL mn)



\* Unlevered cash flow is defined as net cash provided by operating and investing activities, from operations.

\*\* Currency Protected Time Deposit

\* Net FX exposure is calculated as Total FX based Debt, less total Hedged Amount, less Total FX based Cash.

\*\* Excluding the ineffective portion of the hedge portfolio, mainly the existing PCCS contracts, net FX exposure would be USD 458 mn short position.

# Corporate Credit Ratings

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	Fitch	S&P Global
Long Term Rating	B	B
Outlook	Negative	Negative
National Long Term Rating	AAA (tur)	
Last Update	10 November 2022	3 April 2023

## Rating Drivers

- ▶ Limited churn and good revenue growth in a difficult economic environment
- ▶ Prudent management of the financial policy with an effective hedging strategy, which allows for maintaining ample leverage headroom
- ▶ Strong market position as the country's leading converged telecoms operator
- ▶ EBITDA margin pressure from cost inflation
- ▶ Uncertainty relating to the expiry of the fixed-line concession agreement with the government in 2026
- ▶ High exposure to Turkish economy
- ▶ Foreign-Currency IDRs are affected by Türkiye country ceiling

# The Catastrophe of The Century



- Türkiye was hit by massive 7.7 and 7.6 magnitude earthquakes with epicentres in Kahramanmaraş on February 6.
- The twin earthquakes damaged 11 provinces in south-eastern Türkiye; corresponding to an area of 109K km<sup>2</sup>, about 14% of Türkiye.

## Estimated impact on 2023 financials

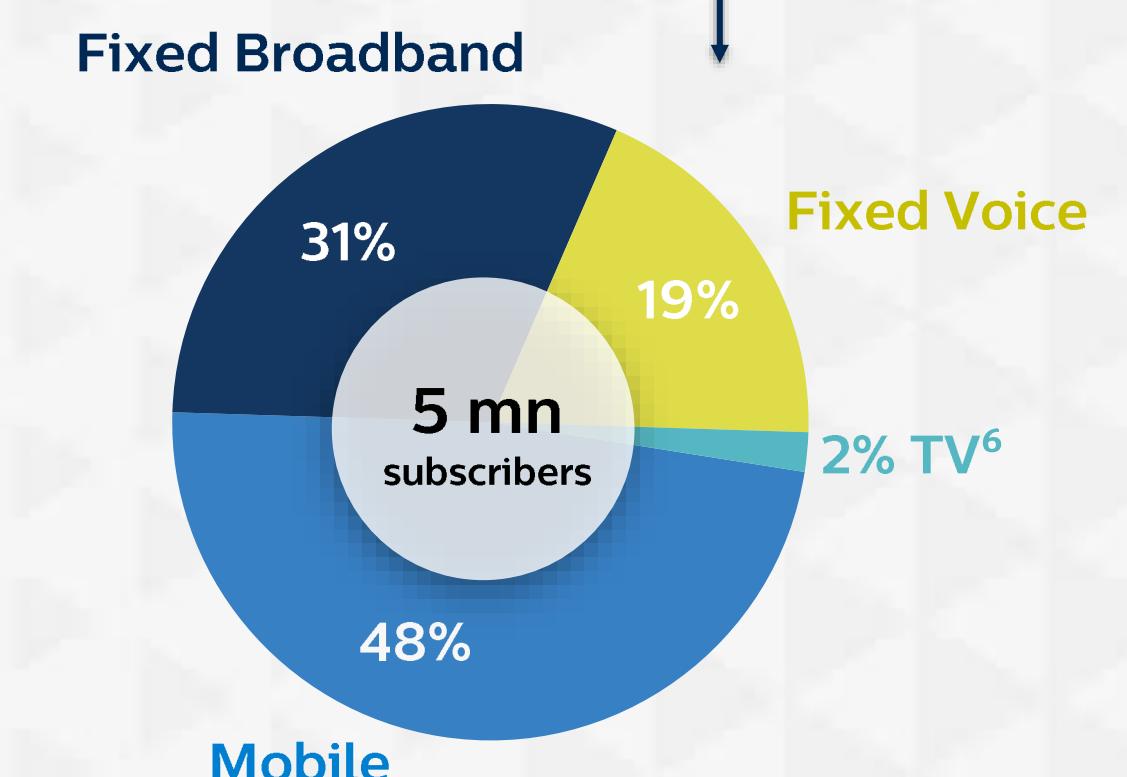
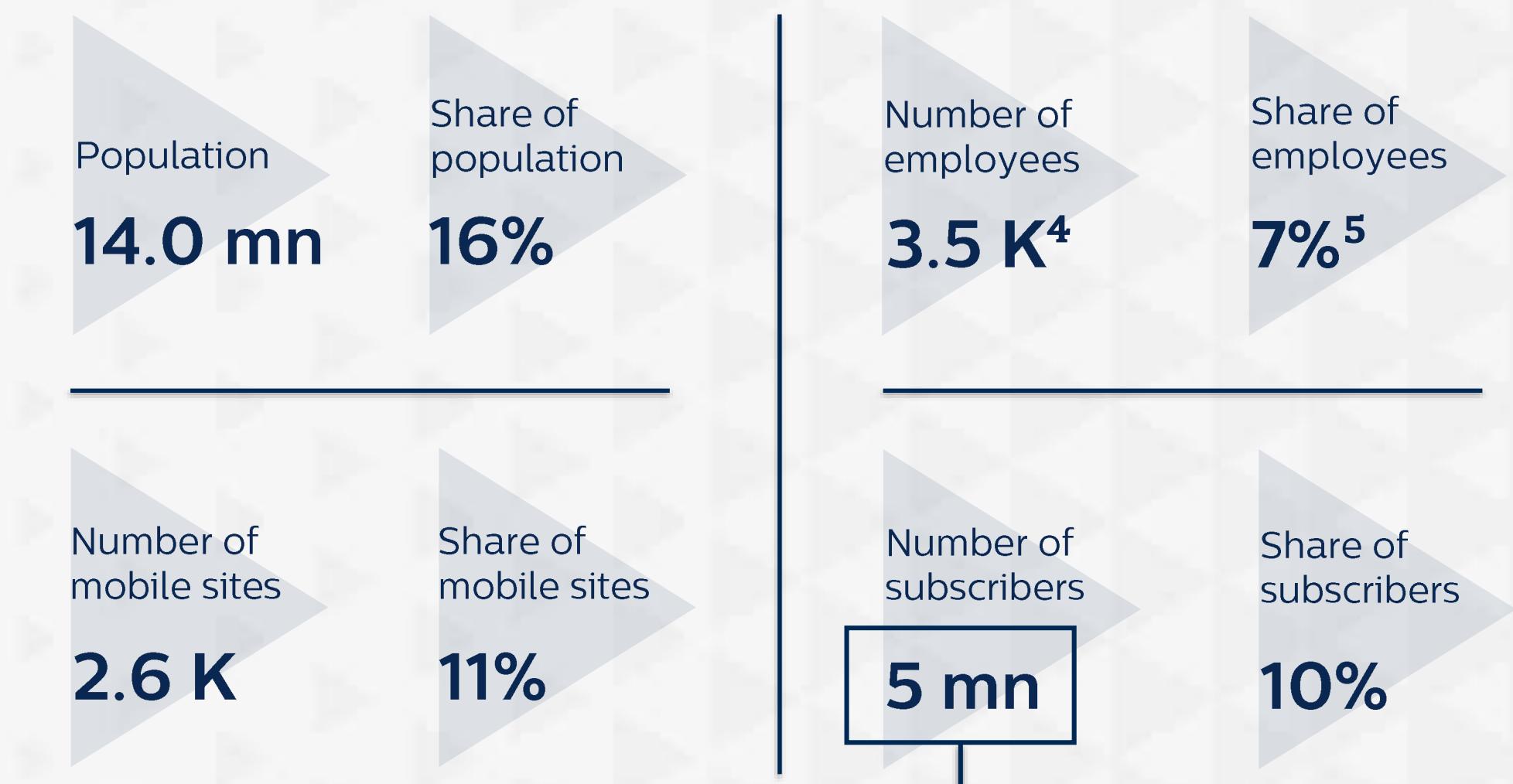
Operational revenue loss <sup>1</sup>	TL 1.0-1.5 bn
One-off CAPEX <sup>2</sup>	USD 50-60 mn
One-off OPEX <sup>3</sup>	TL 2.3-2.5 bn

<sup>1</sup> Includes churn, line suspension, giveaways and other items.

<sup>2</sup> Most capex recoverable through insurance within ~18 months we believe.

<sup>3</sup> Includes earthquake related personnel cost, disaster recovery cost, bad debt, humanitarian aid, donations and other items. Minor portion of opex is also recoverable through insurance claims.

## In the earthquakes-affected region



<sup>4</sup> Includes outsourced and subsidiaries' employees of which most are call centre personnel.

<sup>5</sup> Excludes outsourced personnel

<sup>6</sup> Excludes Tivibu Go

All numbers are estimates and subject to change. We used certain assumptions in our estimates.

# What We Have Done

## Disaster recovery

- Sent 1.4K employees, incl'g the 138 TTAKE<sup>1</sup> staff, to the region from other areas
- 224 mobile sites installed, more planned
- Sent 951 generators, supplied/used 352K litres of fuel (of which 255K in first 5 days) to remedy power outages
- Sent 124 containers for the victims, employees, rescue & recovery personnel
- Opened AssisTT building as shelter to victims, employees and their families
- TTAKE rescued 65 citizens from the rubbles
- Financial support to employees
- Humanitarian aid and TL 2 bn of donation

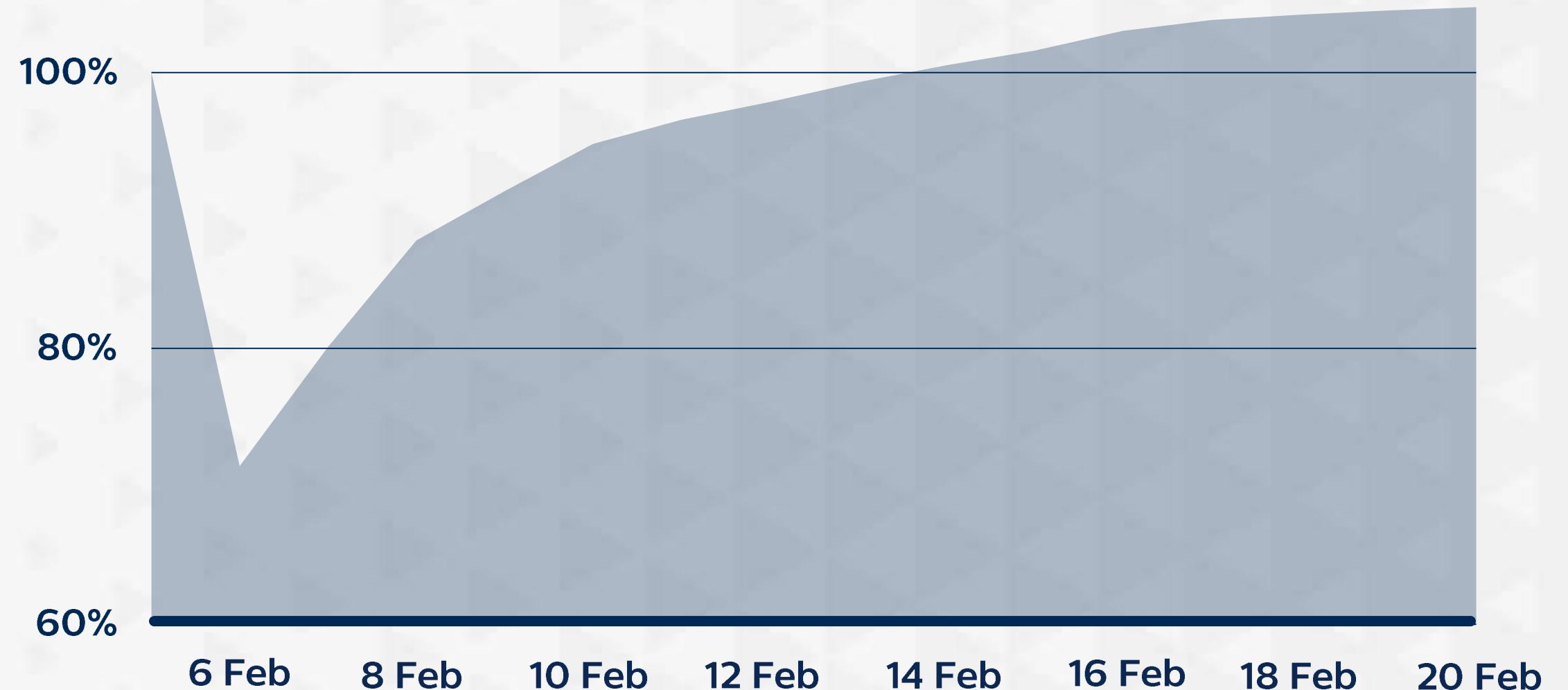
## More work to do

- Construct mobile and WiFi infrastructure for tent/container cities
- Replacement of destroyed rooftops
- Replacement of destroyed core network equipment
- Partial replacement of lost fibre cable

## Mobile

- One-month free communication
- Free additional benefits (500Min+500SMS+2GB weekly) & discounted additional packages
- Activated all suspended lines due to indebtedness
- Discount for postpaid subscribers whose contracts expire
- No activation/deactivation fee & free SIM card change
- No cancellation fee (excl'g number porting) & free line suspension

## Average rate of active mobile sites in the region<sup>2</sup>



## Fixed<sup>3</sup>

- No charge for subscribers with less than 1 GB usage over Feb 7-20 for three months
- Free internet access at Türk Telekom WiFi spots
- Extending contract terms to April for subscribers whose contracts expire until March
- No cancellation fee
- No activation/deactivation fee for FBB & FV
- Extending free suspension period up to 270 days
- Free use of public payphones by end-March

<sup>2</sup> Based on number of mobile sites

<sup>3</sup> Fixed Broadband, Fixed Voice and TV Home

<sup>1</sup> Türk Telekom's voluntary search and rescue team

# Guidance

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	2022 Actuals	2023 Guidance <sup>1</sup>
Revenue (exc. IFRIC 12) <sup>2</sup>	40.1% growth	Around 52-55% growth
EBITDA	TL 19.1 bn	Around TL 23-25 bn
CAPEX	TL 13.9 bn	Around TL 17-19 bn

(1) 2023 guidance expectations represent approximate values. Includes the effect of twin earthquakes that struck south-eastern Türkiye on February 6, 2023, based on our initial impact analysis. Turkish government announced State of Emergency in the ten provinces affected by the earthquakes. Additional possible measures in the coming period may further affect our operations and financial performance; hence our impact analysis and 2023 guidance.

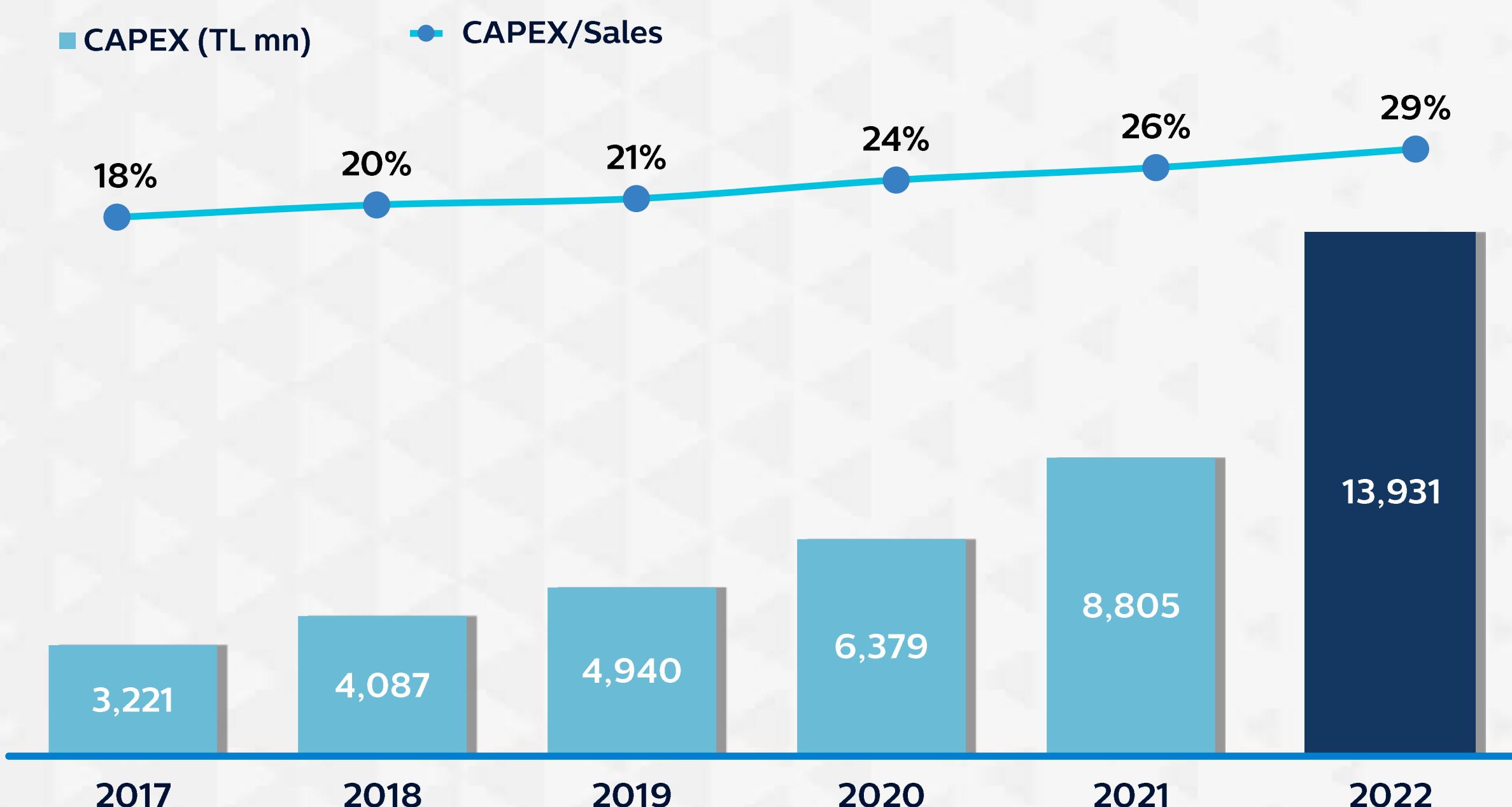
(2) IFRIC 12 adjustment is a non-operational revenue line booked in conjunction with upgrades to our fixed line infrastructure such as the upgrade from copper to fibre based network.

# CAPEX

40

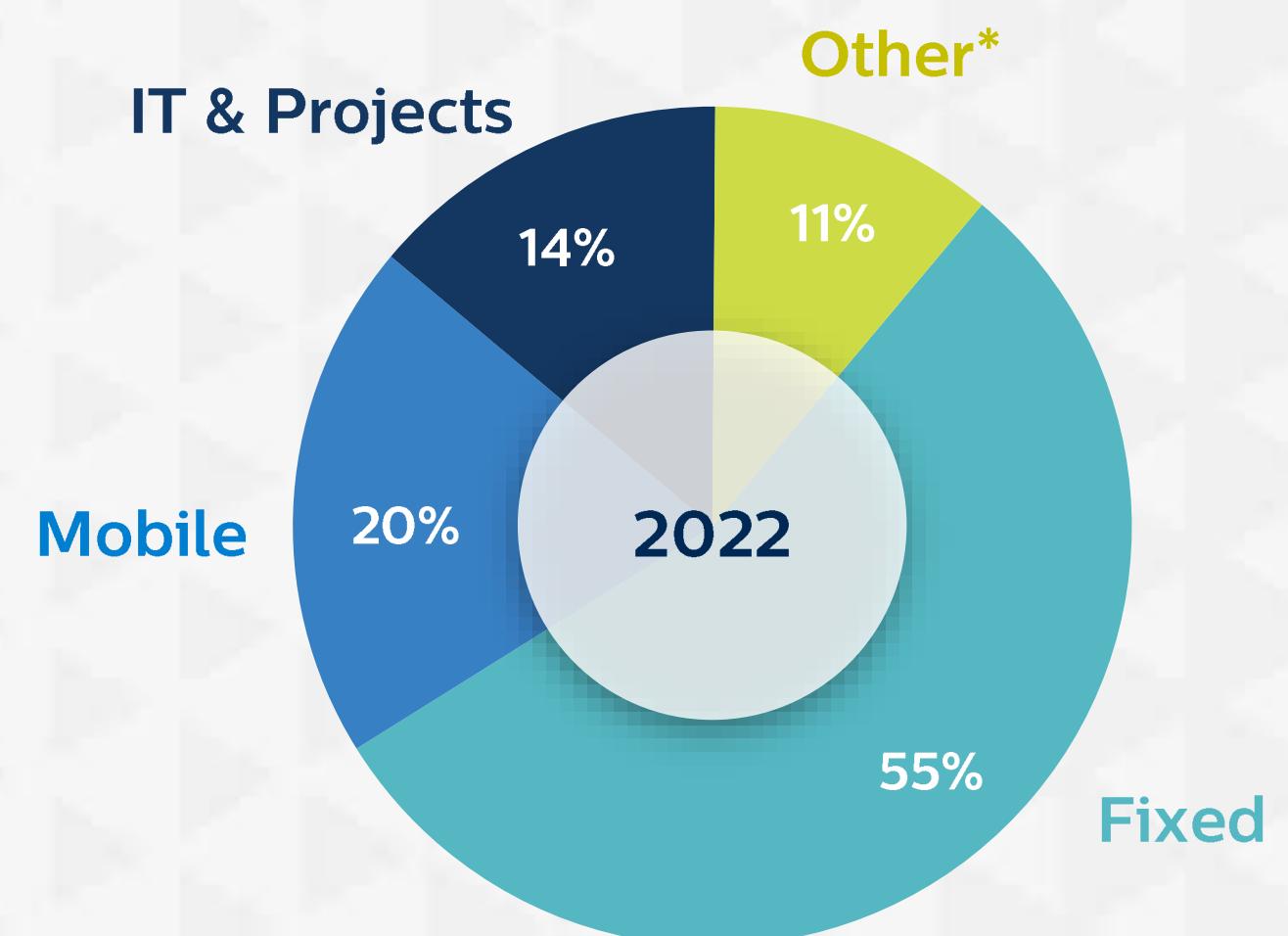
Major Capex areas are fibre network roll-out in fixed line, network investments in mobile and IT transformation projects

## Capex & Capex / Sales



Note: Capex figures exclude license fees

## 2022 Capex Breakdown (%)



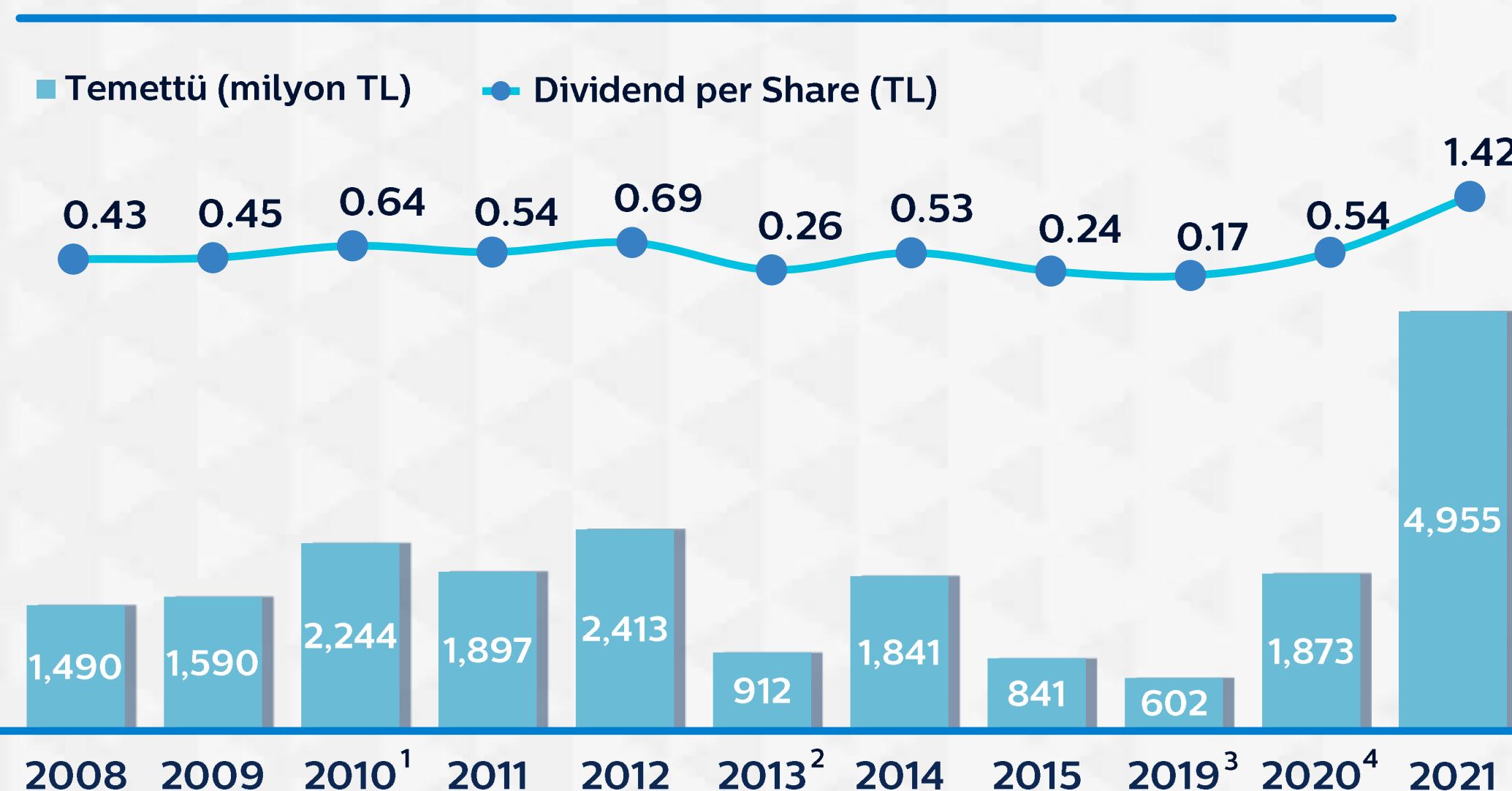
\* Other Capex includes capex for subsidiaries (excl TTI), new revenue streams, IFRS 15 capitalisation, etc.

# Shareholder Remuneration

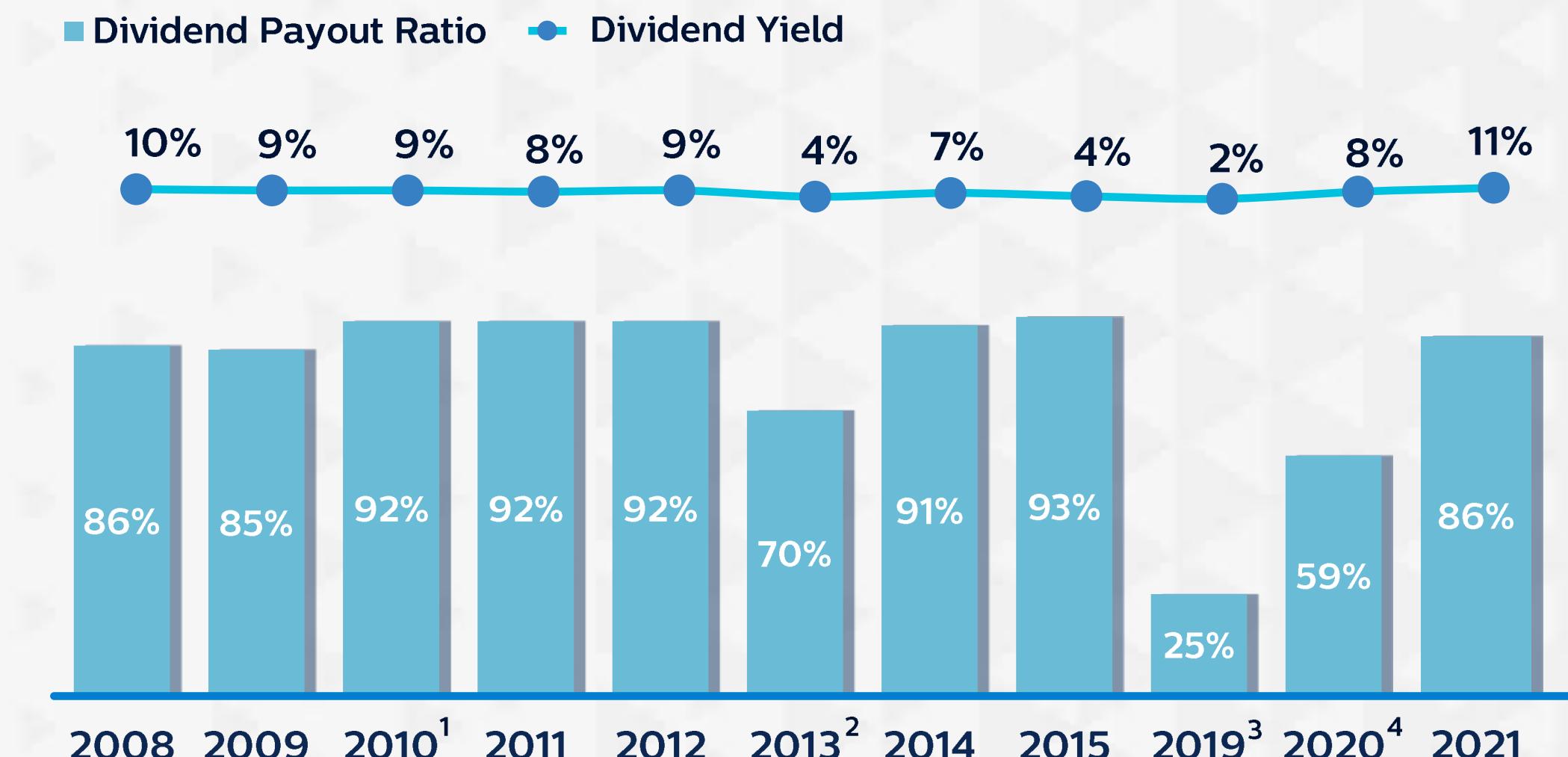
41

- Dividend policy is to distribute the maximum amount of distributable profit subject to relevant articles of the Company's Articles of Association
- Our Board of Directors resolved to propose at the 2022 Ordinary General Assembly that Türk Telekom pays no dividend out of 2022 earnings. The decision is subject to approval of the General Assembly which is scheduled to be held on March 31, 2023.

## Dividend Distribution



## Dividend Yield & Payout Ratio



(1) The cap in the first legal reserve was reached in 2010.

(2) 2013 dividend payout ratio was revised to 70% with the BoD decision. This is a decision taken in order to implement the plan to integrate Türk Telekom Group companies and to prepare for potential transactions related to the integration.

(3) 2019 dividend payout ratio was decided as 25% according to the temporary CMB regulation which capped dividend payout from 2019 earnings to 25%.

(4) 2020 dividend distribution was made in three installments. Dividend yield was calculated based on the distribution dates.

Note: Based on General Assembly decision, no dividends distributed for the activity years 2016 & 2017 & 2018.

# Sustainability



# Sustainability Strategy and Priorities

## ► Customer-oriented

Customer-oriented approach in operations: continuous focus on enriching the customer experience.

## ► Contribution to Society

Offering information technologies, that drive sustainable economic growth and social development.

## ► Confidence Focus – Responsible Business

Undertaking activities in a reliable, honest, legal and ethical manner.

## ► Climate Change and Environment

Aware of the risks posed by global climate change. Eager to deliver on environmental responsibilities.

## ► Human-oriented

Applying the principle of 'Makes You Feel Valuable' to all human resources policies, systems and processes by putting employees at the centre.

## Sustainability Organisations & Indexes that We Are Included



FTSE4Good



BORSA İSTANBUL  
SUSTAINABILITY

## Our SDG Aligned Targets

- Reducing carbon emissions by **35%\***
- Increasing energy production from solar energy by **60%**
- Supporting our employees' development
- Serving the sustainable society and providing equal opportunity
- Encouraging women's participation in workforce



\* It is aimed to reduce the carbon emissions created during 2020, by 35%.

# Sustainability Studies



## Environmental Sustainability

- Products and services with low carbon emissions reduce greenhouse gas emissions
- The first Turkish telecommunications company that participated in CDP (since 2011)
- ISO 14001 Environmental Management System
- E-invoice
- Digital document



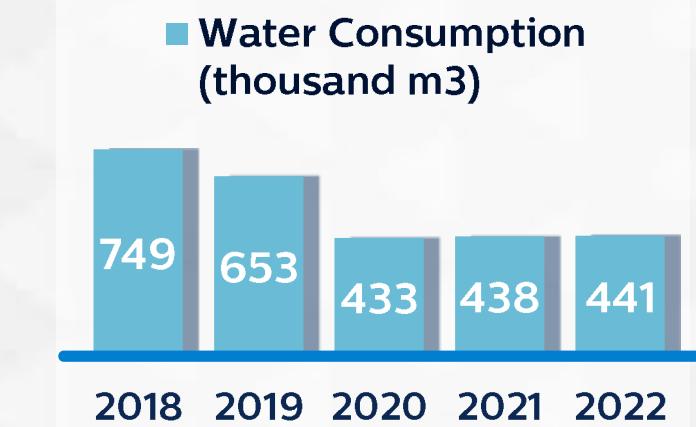
## Energy Efficiency

- Efficient use of resources with **Next Generation City** platform
- **Use of environmentally friendly air conditioners** to reduce greenhouse gas emissions at base stations
- Total power of renewable energy systems increased to **4 MW**
- **I-REC (Renewable Energy Certificate)** for our data centres\*
- Smart Energy Management Platform



## Water & Energy Management

- Building Centralisation Project to reduce water consumption
- Decreased electricity consumption over the years in line with the targets
- ISO50001 Energy Management System Certificate for our data centers\*



## Waste Management

- Reducing rapid consumption of natural resources with **waste management**
- Leaving a livable environment for future generations with the **Zero Waste** project



\* The certificate has been obtained for Türk Telekom's three data centres: Gayrettepe, Ümitköy and Esenyurt.

# Sustainability Values

## Occupational Health and Safety

- ▶ Occupational Health and Safety Committees
- ▶ ISO 14001 Environmental Management System Certificate
- ▶ ISO 45001 Occupational Health and Safety Management System Certificate
- ▶ Occupational Health and Safety legislation training for over **20 thousand** employees
- ▶ Integrated Management System Policy
- ▶ ISO 9001 Quality Management System
- ▶ TSE Covid-19 Safe Service Certificate



## Our Employees

- ▶ 19% female, 81% male Türk Telekom employee distribution; 59% female, 41% male Türk Telekom subsidiaries employee distribution
- ▶ Freedom of association and right to collective bargaining
- ▶ Average hours of training per employee: **35.2** Education satisfaction: **4.6** out of 5
- ▶ Inventor Idea Development System; supporting the participation of women in workforce



## Information Security

- ▶ Information Security Policy
- ▶ Awareness and training on Personal Data Protection Law
- ▶ Employee training on data security and privacy
- ▶ Information Security Certifications: ISO 27001 & PCI-DSS Certificates



## Our Suppliers

- ▶ Procurement Policy
- ▶ Supplier Performance Evaluation Process
- ▶ Safe working conditions
- ▶ Compliance with Human Rights Policy

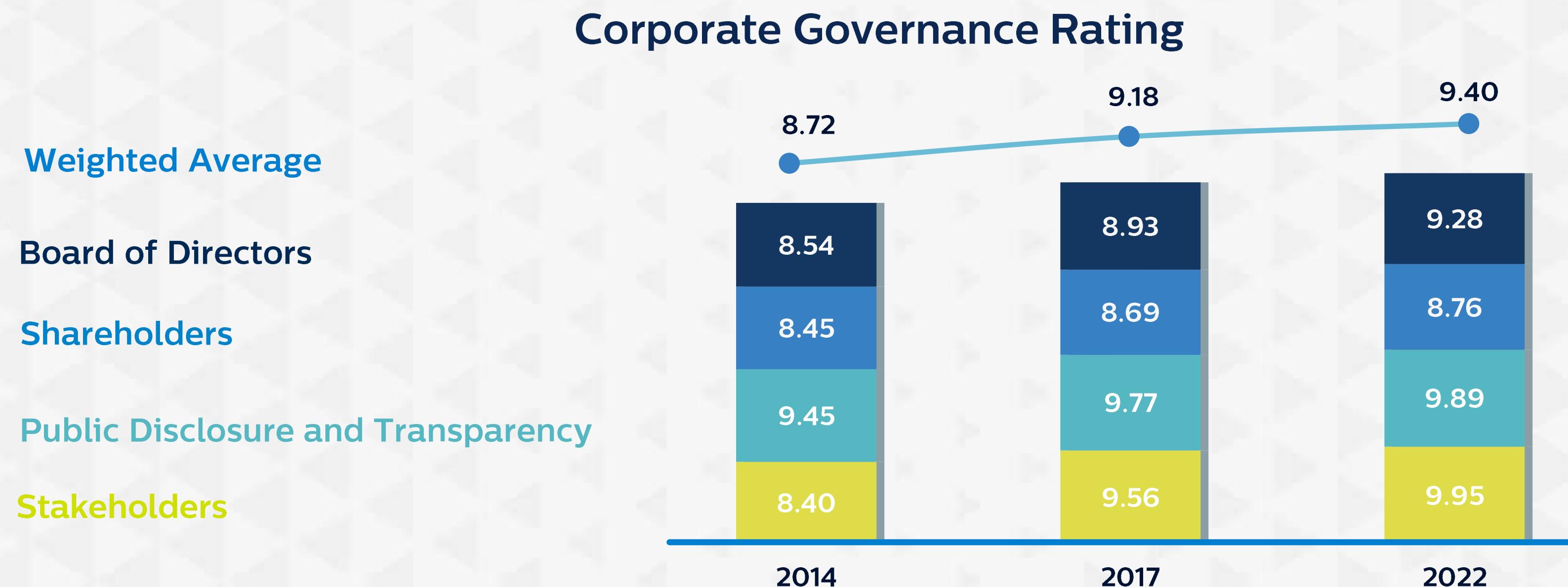


# Corporate Governance Highlights

- ▶ 9 Board Members, 3 of which are independent
- ▶ Board of Directors Women Membership; aiming to reach target in the next 5 years
- ▶ Among companies with the highest score in the category of "Stakeholders" and "Public Disclosure & Transparency"
- ▶ Only telecom company in the BIST Corporate Governance Index since 2009



- ▶ Separate Chairman and CEO
- ▶ Sustainability Committee reporting to the Board of Directors
- ▶ Audit Committee composed entirely of Independent Board Members



# Group Companies



# Group Companies



**5G and beyond next-generation telecommunication technologies R&D company and solution provider**

- Netsia BB Suite: Next generation broadband access technology for fixed networks
- vRAN (RIC): SDN-Based Radio Access Network technology for LTE and 5G with numerous international patents
- NCA Suite: Network Performance Monitoring and Customer Experience Management (NPM/CEM) solutions used by telecom operators in Türkiye and in the world
- ULAK: Türkiye's first and only 4.5G (LTE-A) base station development project
- DEFINE: Türkiye's first domestic DPI device development project under the roof of OTAK Technology
- Productisation and Commercialisation in R&D activities
- Member of BBF, member of ONF and ONAP with its subsidiary Netsia
- Collaboration with global producers for R&D and solution provision



**Türkiye's leading software developer company & system integrator**

- System Integration Solutions
- Fintech Products and Solutions
- IoT Platform and Solutions
- Artificial Intelligence and Big Data Solutions
- RPA (Robotic Process Automation) and RaaS (RPA as a Service)
- Network Management and Monitoring Solutions
- E-business Solutions
- Healthcare Solutions
- Smart City and Smart Store Solutions
- SAP, Business Intelligence, CRM, Project Management Services
- Managed Services and Consultancy Services



**International arm of the Group opening up to the World in wholesale data, voice, SMS and mobile roaming services**

- 48 thousand kilometres fibre network covering Central and Eastern Europe, Türkiye and the Middle East
- More than 110 points of presence (PoP) in 25 countries
- Billions of minutes of transit voice traffic annually, more than 800 mobile roaming agreements and over 350 LTE mobile roaming agreements with more than 200 business partners
- Unique value-added solutions
- AMEERS and AMEER2: Routes connecting Western Europe to the Middle East
- SEA-ME-WE-5: Submarine cable system connecting Europe to Africa, the Middle East and Asia
- KAFOS: Submarine cable system extending from Black Sea to Europe
- MEDTÜRK: Submarine cable system connecting Middle East, Türkiye and Europe



**Customer experience company offering end-to-end omnichannel solutions**

- With its competent human resources, 15 years of experience and strong infrastructure, end to end customer experience service 24/7 to customers in different sectors from telecommunications to media, from healthcare to finance, from logistics to e-commerce
- Communication centre solutions
- Digital services and technology solutions
- Customer experience and quality solutions
- Outsource management

# Group Companies

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Türkiye's leading and long-established education technologies provider

- E-education products for secondary and high school level
- Leading education products: Raunt, SEBIT VCloud and Vitamin Books
- Content and platform provider in e-education transformation projects in Türkiye and Northern Cyprus



Corporate venture capital company

- Focus on investments which contribute to the growth of early-stage startups and scalable target ventures in the areas of artificial intelligence, digital solutions, healthcare, and education
- Healthcare: Virasoft, DoctorTurkey and Kidolog
- Education: MentalUP
- Energy: Eltemtek
- Social Media: APPYAP
- Digital Marketing: Earnado
- Artificial Intelligence: Syntonym, B2Metric, Optiyol, QuantWiFi, MythAI, Arcanor, Cameralyze



Payment services and electronic money company

- Value-adding products and services for both customers and the industry with innovative and reliable payment solutions
- CBRT license for payment and electronic Money services
- Strong position in mobile payments with its everexpanding network of merchant members
- Innovative fintech solutions with Pokus
- Growth in other payment services and products (Corporate Bill Payment, Bill Analytics, Virtual POS, Android POS etc.)



Türk Telekom's BRSA licensed financing company

- Individual and commercial financing compatible with digitalisation-led changing purchasing and payment habits
- Reaching a broad customer base through Türk Telekom's extensive dealer channel, contributing to the growth of the financial sector and increasing access to financing
- Easy and fast fintech experience in addition to financing support for customers' technological needs
- Rapid growth differentiated with focus on customer experience and continuous improvement

# Appendix



# Income Statement

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(TL mn)	Q4 '21	Q4 '22	YoY Change	2021	2022	YoY Change
<b>Revenues</b>	9,864	15,287	55.0%	34,273	48,042	40.2%
<b>EBITDA</b>	4,301	5,594	30.1%	16,415	19,148	16.6%
<b>Margin</b>	43.6%	36.6%		47.9%	39.9%	
<b>Operating Profit</b>	2,623	3,251	23.9%	10,213	11,046	8.2%
<b>Margin</b>	26.6%	21.3%		29.8%	23.0%	
<b>Financial Inc. / (Exp.)</b>	(2,176)	(2,276)	4.6%	(4,592)	(9,210)	100.6%
FX & Hedging Gain / (Loss)	(1,592)	(1,463)	(8.1)%	(2,557)	(6,557)	156.4%
Interest Inc./(Exp.)	(536)	(718)	33.9%	(1,858)	(2,722)	46.5%
Other Financial Inc./(Exp.)	(47)	(94)	101.2%	(177)	69	n.m.
<b>Tax Inc. / (Exp.)</b>	636	35	(94.5)%	141	2,298	1534.6%
<b>Net Income</b>	1,084	1,011	(6.7)%	5,761	4,135	(28.2)%
<b>Margin</b>	11.0%	6.6%		16.8%	8.6%	

# Balance Sheet

(TL mn)	31.12.2021	30.09.2022	31.12.2022
<b>Total Assets</b>	<b>58,338</b>	<b>76,341</b>	<b>80,732</b>
Cash and Cash Equivalents	7,697	5,824	5,125
Tangible Assets <sup>1</sup>	18,989	26,765	29,964
Intangible Assets	14,332	15,712	17,774
Right of Use Assets	1,579	1,818	1,801
Other Assets <sup>2</sup>	15,741	26,222	26,069
<b>Total Equities and Liabilities</b>	<b>58,338</b>	<b>76,341</b>	<b>80,732</b>
Share Capital	3,260	3,260	3,260
Reserves, Retained Earnings and Other Equity Items	10,990	16,192	16,710
Interest Bearing Liabilities <sup>3</sup>	29,803	42,443	41,920
Bank Borrowings and Bonds	28,364	40,798	40,401
Lease Liabilities	1,439	1,645	1,520
Other Liabilities <sup>4</sup>	14,284	14,446	18,841

(1) Tangible assets include property, building or plant and equipment and investment property

(2) Major items within other assets are trade receivables, due from related parties, inventories, deferred tax asset, tax assets and other current assets.

(3) Includes short-term and long-term borrowings and lease obligations

(4) Major items within other liabilities are deferred tax liability, trade payables, provisions, income tax payable, due to related parties, other current liabilities and provisions for employee termination benefits

# Cash Flow Statement

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(TL mn)	Q4 '21	Q4 '22	YoY Change	2021	2022	YoY Change
<b>Operating Cash Flow</b>	7,222	8,473	17.3%	15,681	17,391	10.9%
<b>Investing Cash Flow</b>	(3,963)	(6,611)	66.8%	(7,393)	(12,279)	66.1%
CAPEX	(4,483)	(7,034)	56.9%	(8,676)	(14,006)	61.4%
Other Investing Activities	520	423	(18.7)%	1,283	1,727	34.7%
<b>Currency Protected Time Deposit</b>	-	254	-	-	(3,862)	-
<b>Financing Cash Flow<sup>1</sup></b>	(1,138)	(3,500)	207.6%	(6,313)	(4,142)	(34.4)%
<b>Net Change in Cash Position<sup>2</sup></b>	2,122	(1,386)	n.m.	1,975	(2,893)	n.m.

(1) Includes currency translation differences

(2) Blocked deposits are included in operating activities rather than net cash position

# Revenue Breakdown

(TL mn)	Q4 '21	Q4 '22	YoY Change	2021	2022	YoY Change
Fixed Voice	685	847	23.7%	2,728	3,058	12.1%
Broadband	2,887	4,140	43.4%	10,712	14,171	32.3%
Mobile	3,074	4,999	62.6%	11,500	16,426	42.8%
TV	111	139	25.5%	424	507	19.6%
Corporate Data	629	823	30.9%	2,357	2,952	25.3%
International Revenues	612	1,022	67.0%	2,004	3,187	59.0%
Other <sup>1</sup>	728	1,745	139.6%	2,069	4,219	103.9%
Eliminations	(24)	(25)	7.5%	(92)	(97)	5.8%
<b>Revenue w/o IFRIC</b>	<b>8,703</b>	<b>13,690</b>	<b>57.3%</b>	<b>31,702</b>	<b>44,422</b>	<b>40.1%</b>
IFRIC-12	1,162	1,598	37.5%	2,571	3,621	40.8%
<b>Total Revenue</b>	<b>9,864</b>	<b>15,287</b>	<b>55.0%</b>	<b>34,273</b>	<b>48,042</b>	<b>40.2%</b>

(1) Includes ICT companies, device sales, domestic interconnection and other revenues

# Opex Breakdown

(TL mn)	Q4 '21	Q4 '22	YoY Change	2021	2022	YoY Change
<b>Direct Costs</b>	<b>2,147</b>	<b>3,617</b>	<b>68.5%</b>	<b>7,385</b>	<b>10,515</b>	<b>42.4%</b>
Interconnection	746	1,033	38.4%	2,760	3,422	24.0%
Tax	760	1,209	59.1%	2,844	3,976	39.8%
Provisions for Doubtful Receivables	45	60	33.1%	186	194	3.9%
Cost of Equipment and Technology Sales	433	1,031	138.2%	1,050	2,017	92.1%
Other Direct Costs	163	285	74.9%	546	907	66.1%
<b>Commercial Costs</b>	<b>353</b>	<b>483</b>	<b>36.9%</b>	<b>1,081</b>	<b>1,598</b>	<b>47.8%</b>
<b>Other Costs</b>	<b>2,036</b>	<b>4,180</b>	<b>105.3%</b>	<b>7,116</b>	<b>13,577</b>	<b>90.8%</b>
Network & Technology	877	1,668	90.3%	2,788	5,414	94.2%
Personnel	1,286	2,378	84.9%	4,693	7,985	70.2%
Other	(127)	133	n.m.	(365)	177	n.m.
<b>Sub Total</b>	<b>4,535</b>	<b>8,280</b>	<b>82.6%</b>	<b>15,582</b>	<b>25,690</b>	<b>64.9%</b>
IFRIC-12	1,028	1,414	37.5%	2,275	3,205	40.8%
<b>Total OPEX</b>	<b>5,563</b>	<b>9,693</b>	<b>74.2%</b>	<b>17,858</b>	<b>28,895</b>	<b>61.8%</b>

# Operational Highlights

	Q4 '21	Q3 '22	Q4 '22	QoQ Change	YoY Change
<b>Total Access Line (mn)</b>	<b>16.9</b>	<b>17.2</b>	<b>17.3</b>	<b>0.1%</b>	<b>1.9%</b>
Fixed Voice Subscribers <sup>1</sup> (mn)	10.5	9.9	9.5	(3.3)%	(9.3)%
Naked Broadband Subscribers (mn)	6.4	7.4	7.7	4.7%	20.1%
<b>Fixed Voice ARPU (TL)</b>	<b>21.7</b>	<b>26.3</b>	<b>29.1</b>	<b>10.8%</b>	<b>34.1%</b>
<b>Broadband Total Subscribers (mn)</b>	<b>14.3</b>	<b>14.8</b>	<b>14.8</b>	<b>0.4%</b>	<b>3.6%</b>
<b>Fiber Subscribers (mn)</b>	<b>9.6</b>	<b>11.2</b>	<b>11.5</b>	<b>3.2%</b>	<b>20.3%</b>
FTTH/B Subscribers (mn)	2.8	3.3	3.5	6.6%	24.2%
FTTC Subscribers (mn)	6.8	7.9	8.0	1.8%	18.7%
<b>Broadband ARPU (TL)</b>	<b>67.7</b>	<b>84.8</b>	<b>93.2</b>	<b>9.8%</b>	<b>37.6%</b>
<b>Total Tivibu Subscribers<sup>2</sup> (mn)</b>	<b>2.9</b>	<b>2.9</b>	<b>2.9</b>	<b>1.0%</b>	<b>(1.0)%</b>
Tivibu Home Subscribers <sup>3</sup> (mn)	1.5	1.5	1.5	(0.9)%	(3.2)%
<b>Tivibu ARPU (TL)</b>	<b>23.0</b>	<b>28.1</b>	<b>30.0</b>	<b>6.9%</b>	<b>30.4%</b>
<b>Mobile Total Subscribers (mn)</b>	<b>24.0</b>	<b>25.3</b>	<b>25.5</b>	<b>0.8%</b>	<b>6.1%</b>
Mobile Postpaid Subscribers (mn)	15.6	16.6	16.9	2.3%	8.5%
Mobile Prepaid Subscribers (mn)	8.4	8.7	8.6	(1.9)%	1.6%
<b>Mobile Blended ARPU (TL)</b>	<b>42.1</b>	<b>59.1</b>	<b>64.3</b>	<b>8.8%</b>	<b>52.7%</b>
Mobile Postpaid ARPU (TL)	49.5	65.4	72.3	10.6%	46.2%
Mobile Prepaid ARPU (TL)	27.3	42.9	46.7	8.8%	70.8%

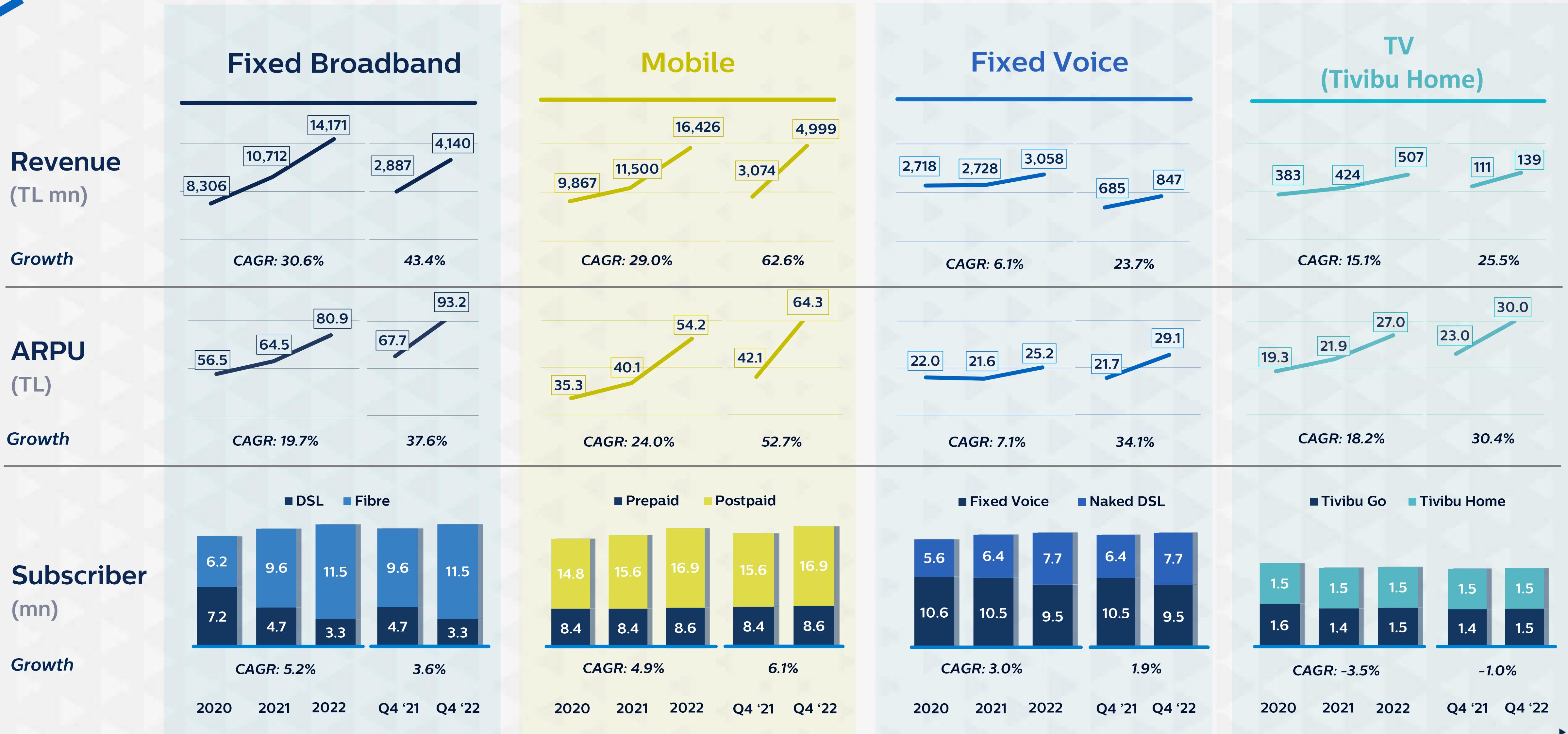
(1) Includes PSTN and WLR Subscribers

(2) Includes IPTV, DTH, and Tivibu GO subscribers

(3) Includes IPTV and DTH subscribers

# Business Lines Performance

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# Shareholder Structure

## Ownership and Corporate Structure



**60% of shares**  
owned by Türkiye Wealth Fund.

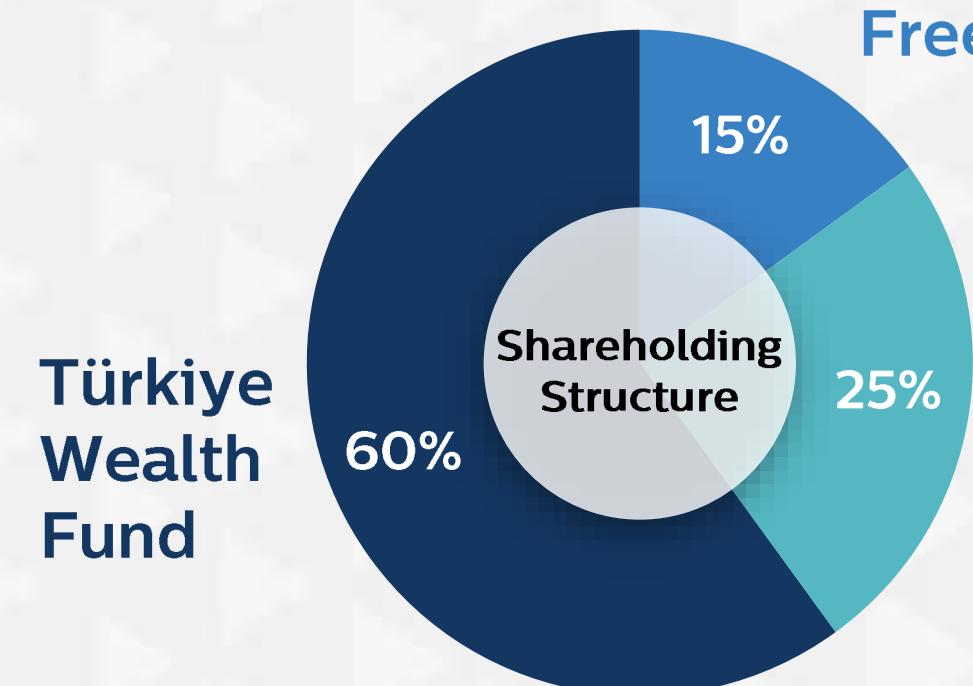


**25% of shares**  
owned by Republic of Türkiye Ministry of Treasury and Finance.

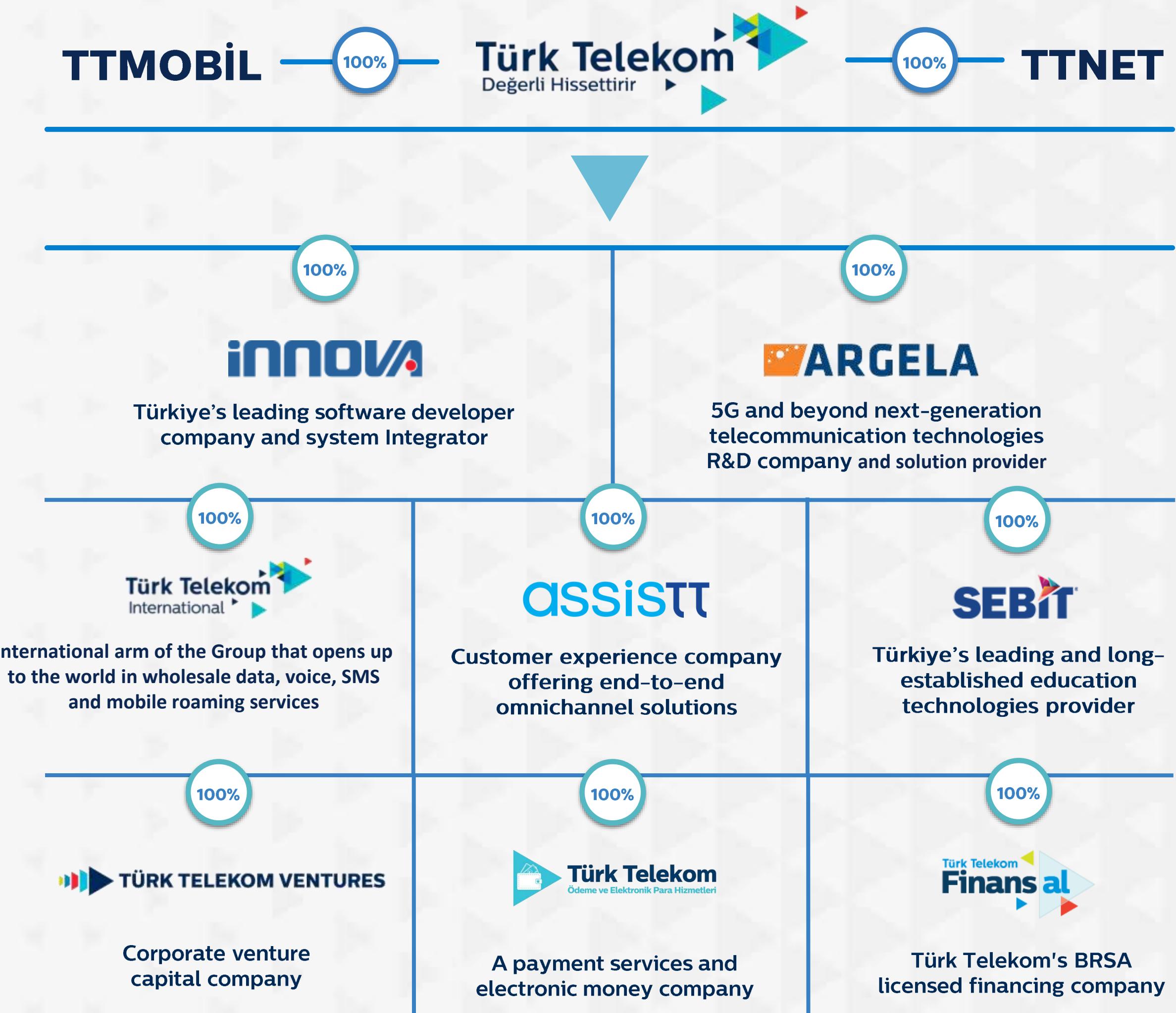


**15% of shares**  
publicly traded on Borsa İstanbul since 2008.  
(of which 1.68% also owned by Türkiye Wealth Fund)

## Shareholding Structure



Republic of Türkiye  
Ministry of Treasury  
and Finance



# Regulatory Actions

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April

- Interconnection rate decrease in Fixed (10%) and Mobile (33%)

November

- 3G tender held
- Mobile Number Portability introduced
- New Electronic Communications Law passed

2008

April

- About 52% reduction in MTRs
- 17% cut in double tandem FTR
- 38% decrease in GSM to GSM retail price cap
- TL per minute pricing introduced

December

- Naked Broadband services started

2010

January

- WLR was introduced

November

- Deregulation on FTRs on international calls and liberalisation on their pricing

2012

July

- Calls over fixed line infrastructure was deregulated. Accordingly, Türk Telekom is no longer designated as having SMP (significant market power) in fixed voice market

2014

April

- LTE Service launch

August

- Mobile on-net price floor regulation for TCELL was lifted

October

- The deadline to shift Port Transmission Model

2016

January

- Fair usage quota was lifted

2019

February

- TT Mobil is once again obligated to adhere to the 'Mobile Price Cap Tariff'

2022

2009

January

- About 50%-55% reduction in MTRs on SMS

March

- Reduction in SCT rate (25% to 5%) on internet services

April

- On-net price floor for TCELL

May

- About 29% reduction in MTRs
- MVNO regulation in place

July

- 3G service launch

September

- Fixed number portability introduced
- Local call liberalisation

2011

April

- Mobile off-net price cap was increased by 4%
- SMS price cap was decreased by 48%

September

- Deregulation on MTRs on international calls and liberalisation on their pricing

October

- ICTA's fibre decision: FTTH/B will be excluded from the market analysis process until 25% fibre market share or for 5 years

2013

March

- Mobile on-net price floor for TCELL formulated by Mobile Termination Rate 1.7x

April

- 75% reduction in MTRs on SMS

July

- 20% reduction in MTRs

September

- Duct Sharing officially started

2015

August

- LTE tender was held

2018

January

- SCT rates for mobile voice, fixed voice, mobile data, and fixed data was unified at 7.5%

June

- Within 3 years from January 2022, mobile interconnection fees will be gradually equalised at 2.10 kurus for all operators

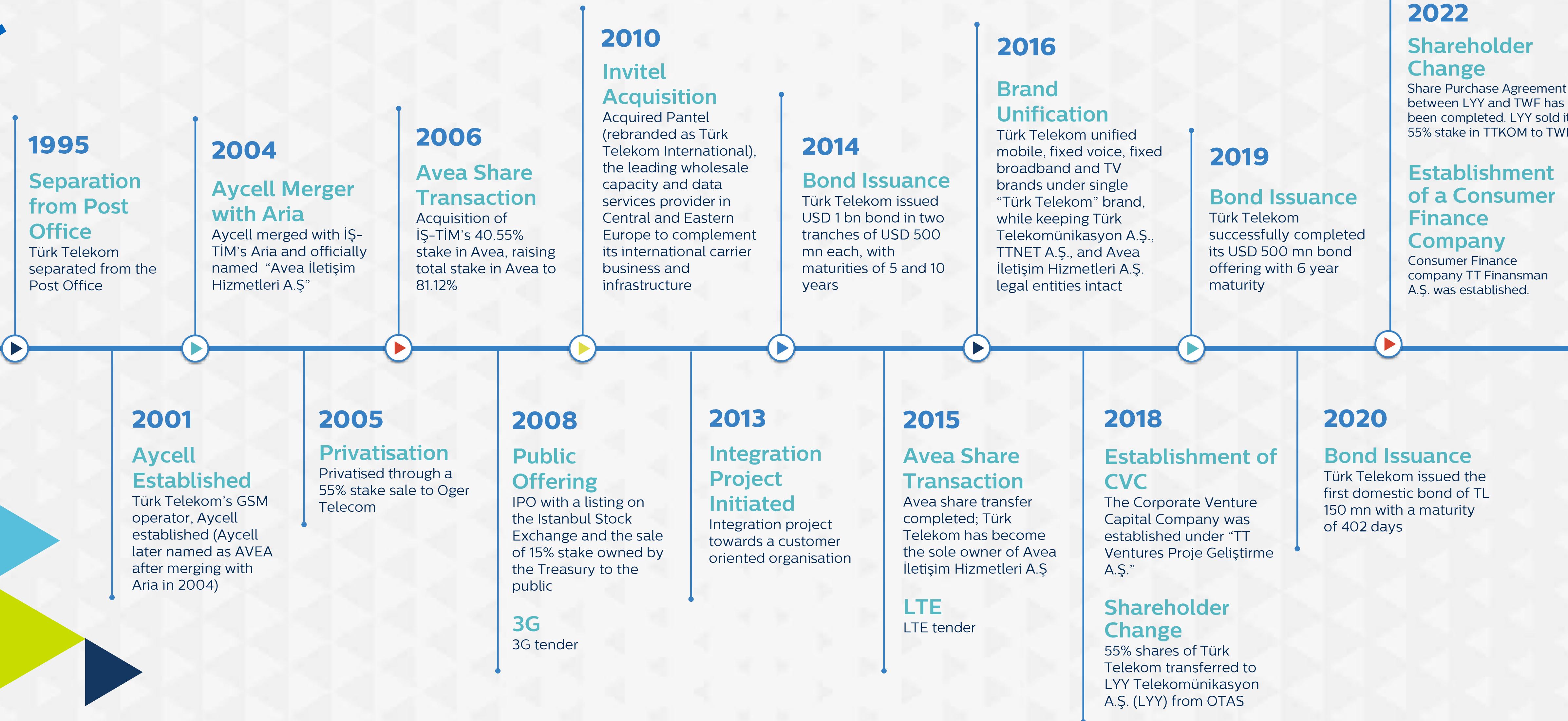
2021

January

- SCT rates for mobile voice, fixed voice, mobile data, and fixed data was unified at 10%

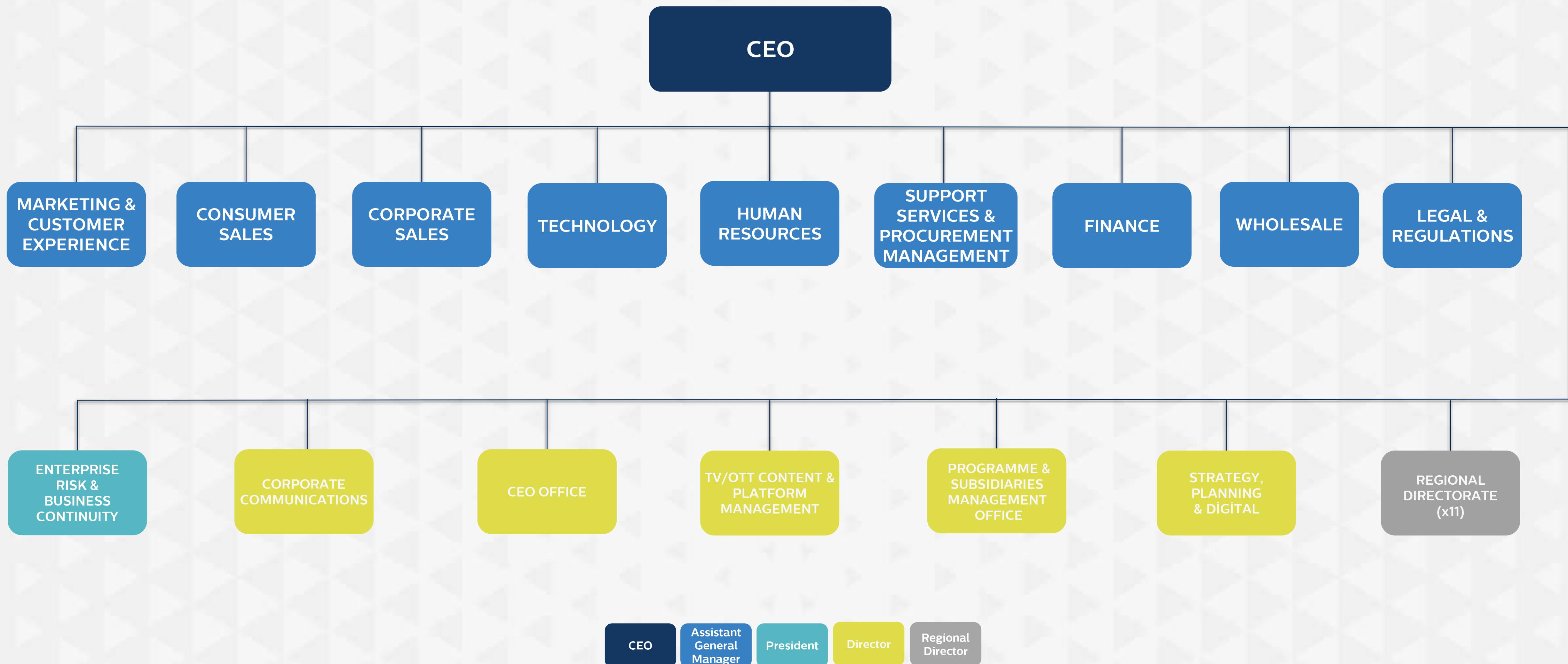


# History



# Organisational Structure

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# Türk Telekom Investor Relations

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**Türk Telekom**  
Değerli Hissettirir

