# The 26.Telecommunications Market Analysis Germany 2025

Results of a survey of VATM member companies in the first quarter of 2025


DIALOG CONSULT GM BH

vatm
WETTBEWERB VERBINDET

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## Notes

- Figures in square brackets indicate the corresponding values for the previous year.
- Information between the columns = annual growth rate of the segment.

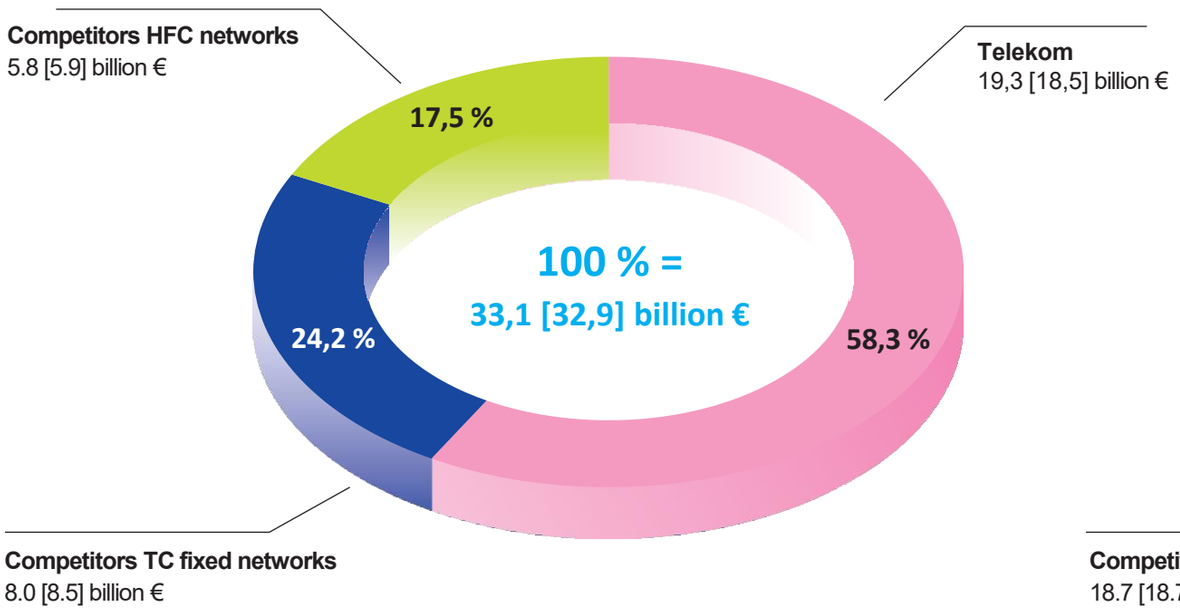
*Chapter I*

# Markets for telecommunications services

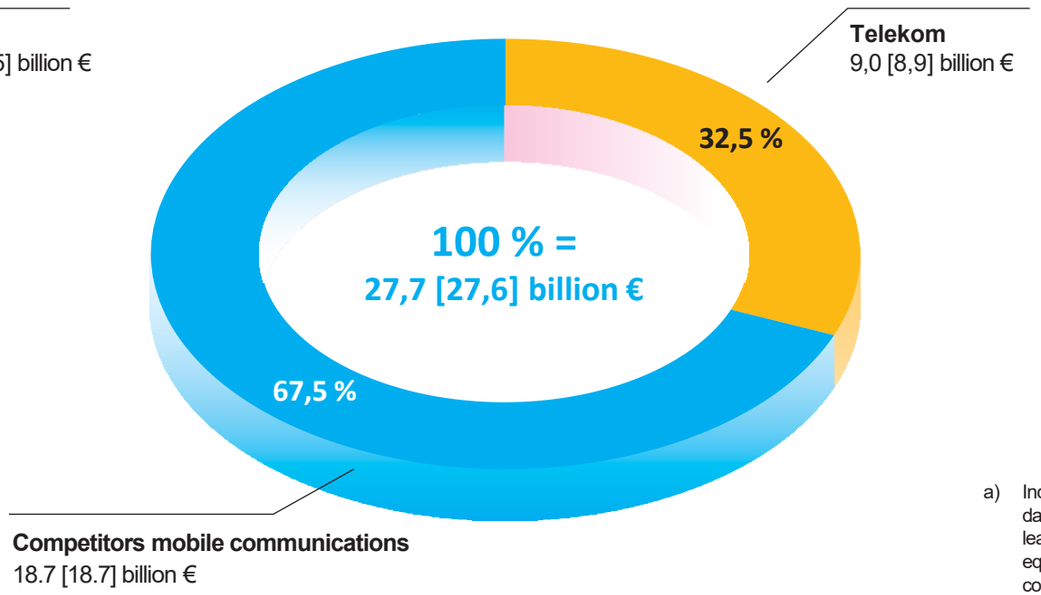
# In the fixed network market, Telekom continues to grow despite its high market share - at the expense of its competitors

**Fig. 1: Fixed-line and mobile communications market[a]**
(External sales, estimate for 2025)

## Fixed-line market




## Mobile communications market

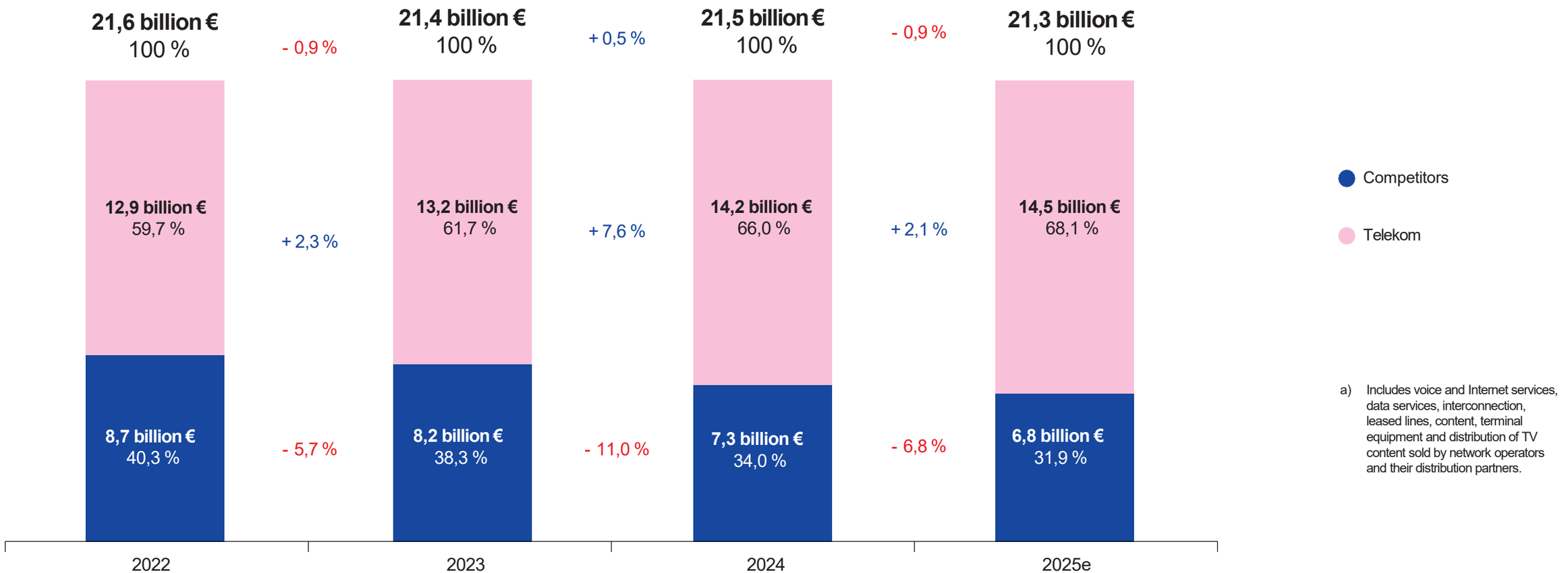



a) Includes voice and Internet services, data services, interconnection, leased lines, content, terminal equipment and distribution of TV content sold by network operators and their distribution partners.

**Total market 60.8 [60.5] billion €**

# In the business customer market, which is heavily dependent on regulation, Telekom has steadily gained market share and is set to reach nearly 70 percent by 2025

**Fig. 2: Market for telecommunications services for business customers by providers[a]**
(external sales, estimate for 2025)

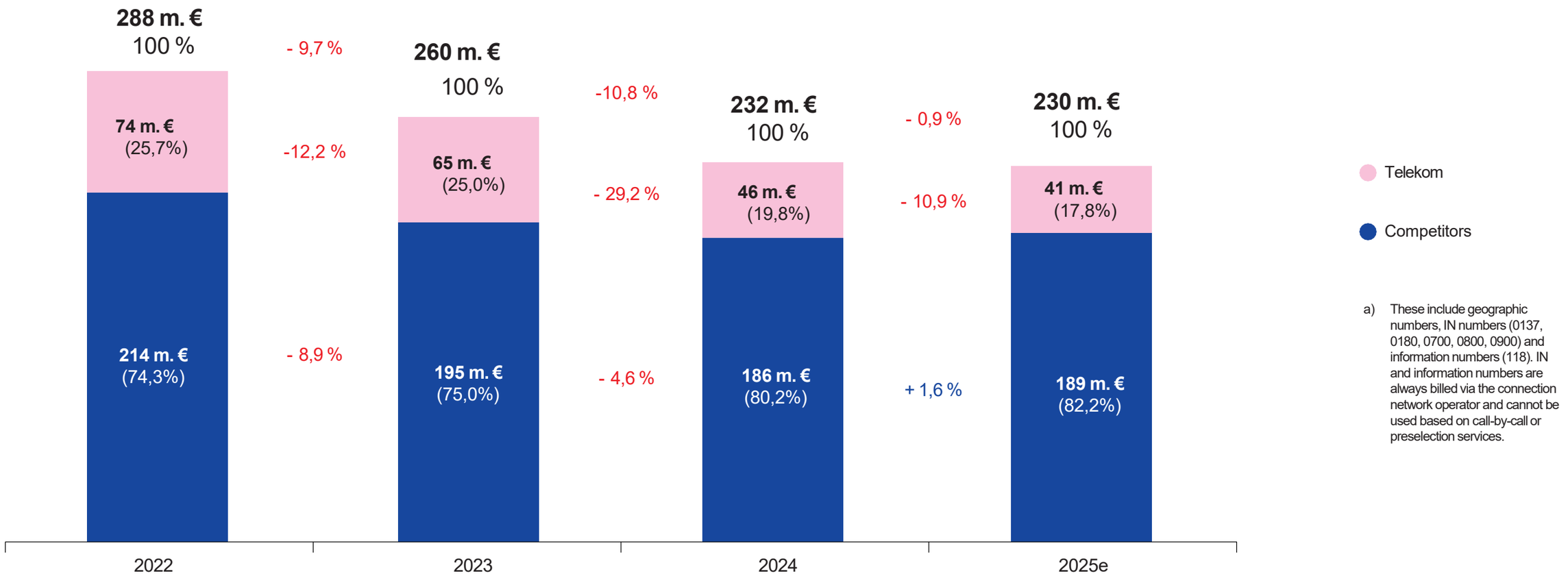



a) Includes voice and Internet services, data services, interconnection, leased lines, content, terminal equipment and distribution of TV content sold by network operators and their distribution partners.

Source: Company information

# AI and chatbots are widely used in customer service; customer interactions via service numbers and service SMS remain essential and revenue stable

**Fig. 3: Market for service numbers and service SMS[a]**
(Revenue, estimates for 2025)

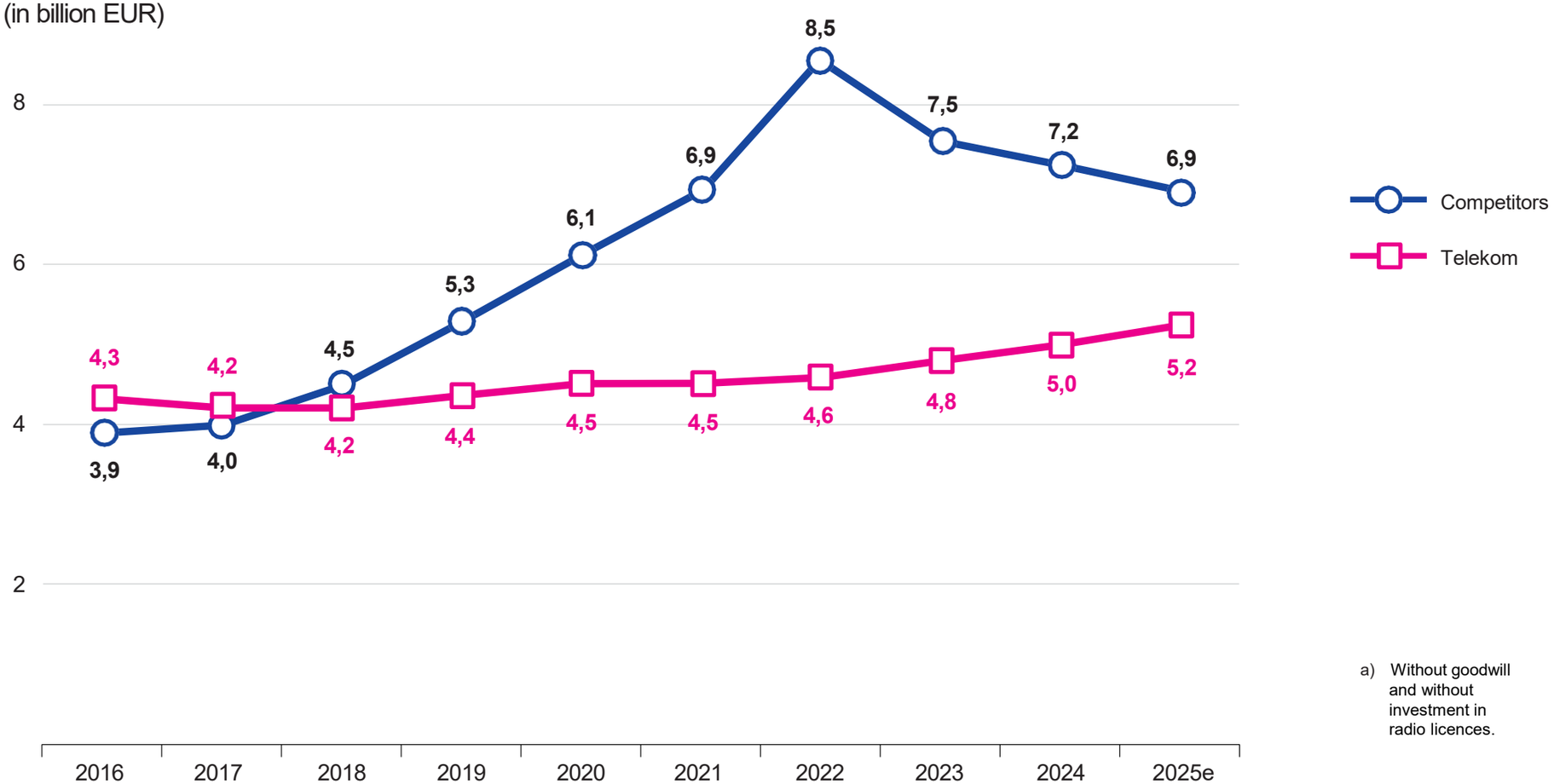



a) These include geographic numbers, IN numbers (0137, 0180, 0700, 0800, 0900) and information numbers (118). IN and information numbers are always billed via the connection network operator and cannot be used based on call-by-call or preselection services.

Source: Company information

# Infrastructure roll-out continues to be driven primarily by competitors, who are investing significantly more than Telekom – Telekom's investments are a reaction to competition

**Fig. 4: Investments in telecommunications equipment[a]**
(in billion EUR)




a) Without goodwill and without investment in radio licences.

Source: Company information

*Chapter II*

# Civil engineering planning for broadband rollout

Development of enquiries in Germany

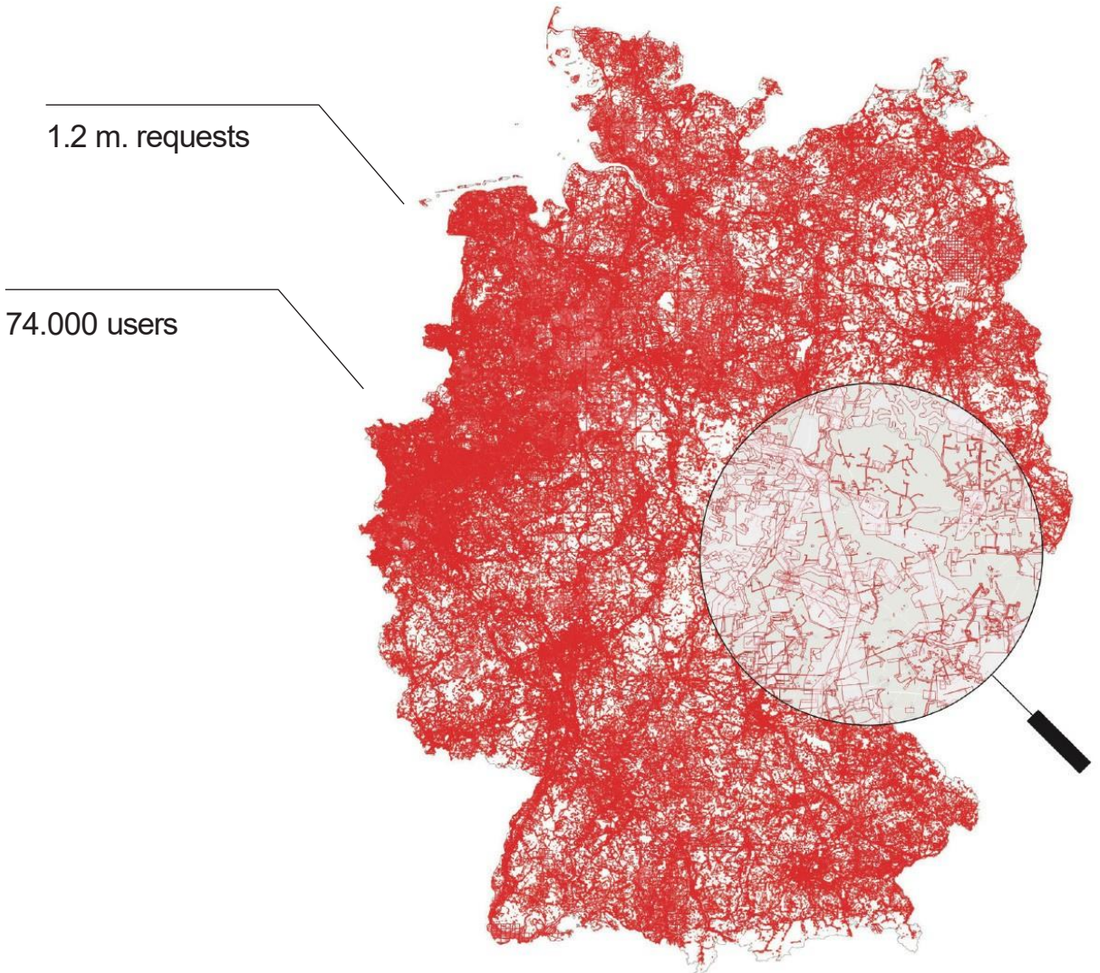
# BIL portal: key platform for utility location, infrastructure planning and safety management

## Fig: BIL portal – Statistical analysis 2016 – 2024

BIL portal is the central tool for identifying and coordinating potential risks in the field of underground infrastructure. It is of great importance given the growing demand for communication, energy generation, transportation, and distribution.

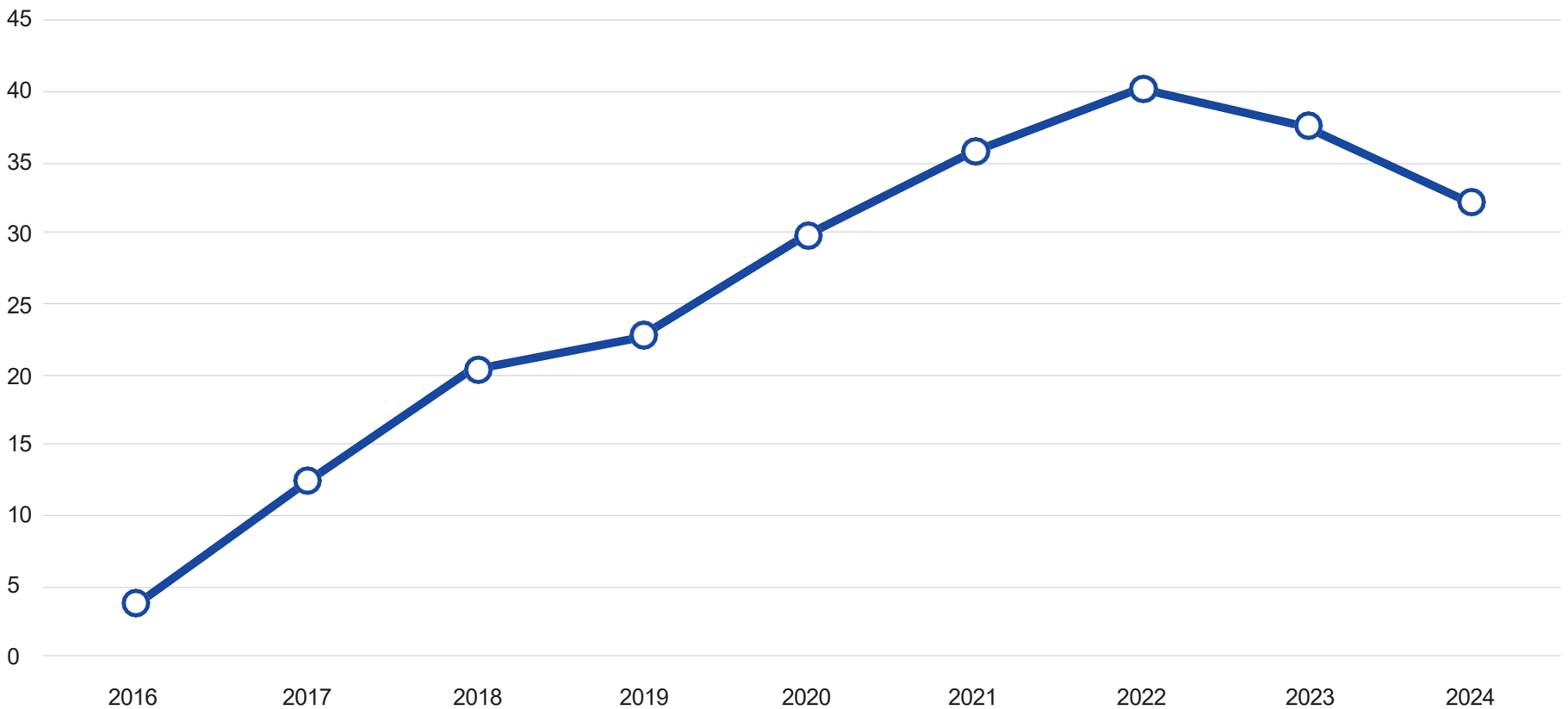
Particularly in the context of network rollout, the portal for enquiries about underground cables is used by approx. 1,000 users every day, primarily from the civil engineering sector. In 2024, a total of 194,000 enquiries from 74,000 registered users were processed, resulting in an extensive database of 1.2 m. planning and construction enquiries since its inception in 2016.

As a cooperative of operators of mostly underground pipeline/network infrastructure systems or other hazardous areas, BIL eG supports its members in informing third parties about their location. The aim is to prevent damage to underground pipeline systems and other vulnerable infrastructure belonging to the cooperative's pipeline operators by the actions of third parties.



# The declining momentum in fibre optic deployment (Fig. 4) is also reflected in the decline in enquiries about broadband deployment on the BIL portal

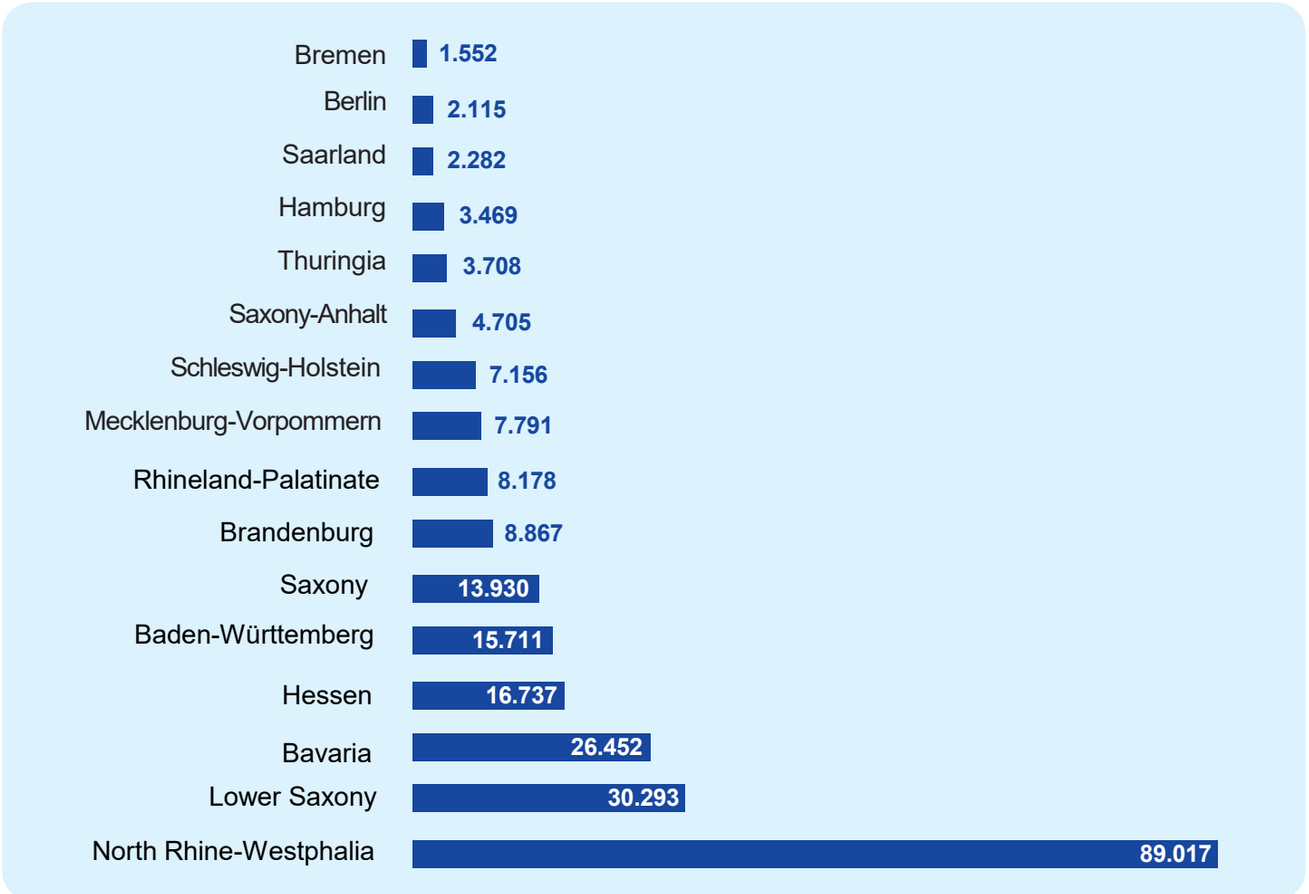
**Fig. 5: Enquiries[a] regarding broadband deployment in thousands**
(Source: BIL eG)

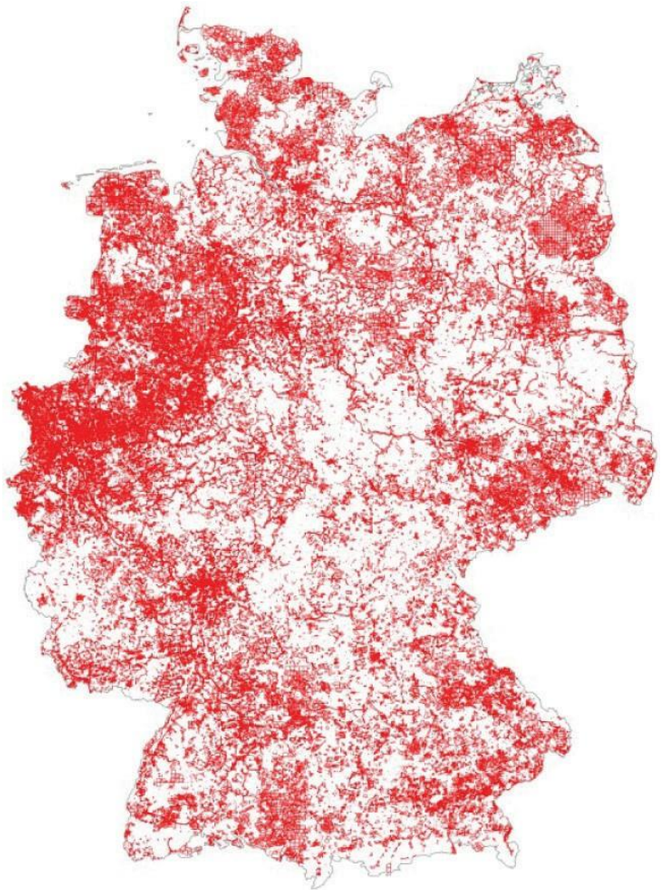



a) 241,963 enquiries for broadband expansion since 2016. Broadband infrastructure deployment projects (laying of telecom and control cables, as well as ducts) account for a significant 17% of all planning and construction requests submitted to the BIL portal in 2024.

# Over 60 per cent of requests for broadband deployment come from the three federal states of North Rhine-Westphalia, Lower Saxony and Bavaria

**Fig. 6: Enquiries[a] regarding broadband deployment in thousands**
(Enquiries since 2016, source: BIL eG)



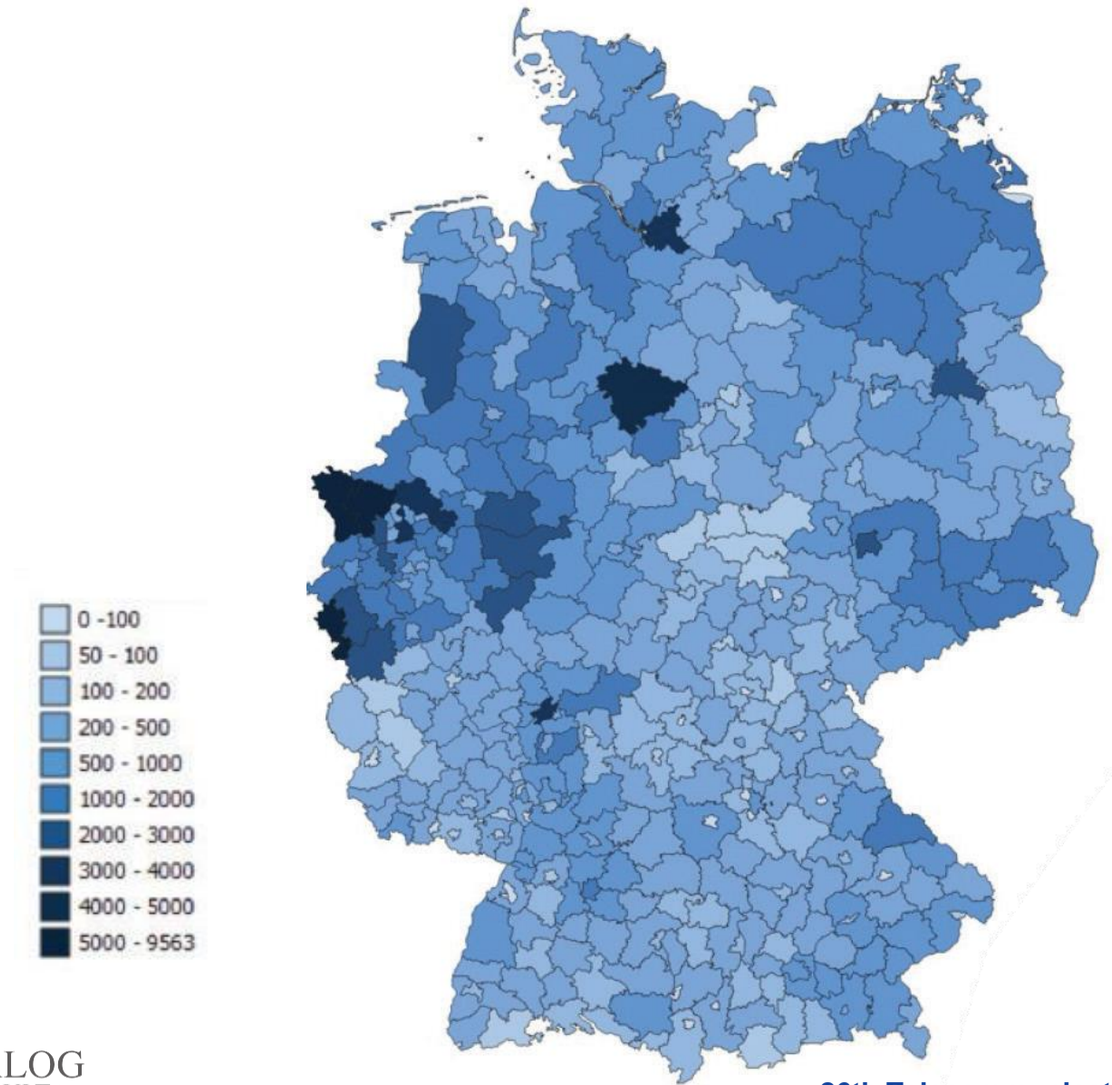





a) 241,963 enquiries about broadband expansion since 2016.

# The top 25 areas account for 30 per cent of all enquiries – both in urban centres and in rural areas

**Fig. 7: Regional priorities for broadband roll-out[a]**




Source: BIL eG

## Broadband expansion – TOP 10 requests district/county vs. independent cities

| | | |
|---|---|---|
| District | **Kleve** | 9563 |
| District | **Wesel** | 6093 |
| District | **City region Aachen** | 5685 |
| County | **Region Hannover** | 4398 |
| District | **Recklinghausen** | 3539 |
| District | **Düren** | 2980 |
| District | **Siegen-Wittgenstein** | 2504 |
| District | **Hochsauerland District** | 2491 |
| District | **Soest** | 2350 |
| District | **Euskirchen** | 2193 |
| | | |
| Independent city | **Frankfurt am Main** | 3771 |
| Independent city | **Dortmund** | 3486 |
| Independent city | **Essen** | 3485 |
| Independent city | **Hamburg** | 3465 |
| Independent city | **Dusseldorf** | 2909 |
| Independent city | **Berlin** | 2112 |
| Independent city | **Leipzig** | 2029 |
| Independent city | **Duisburg** | 2018 |
| Independent city | **Bochum** | 1844 |
| Independent city | **Cologne** | 1669 |

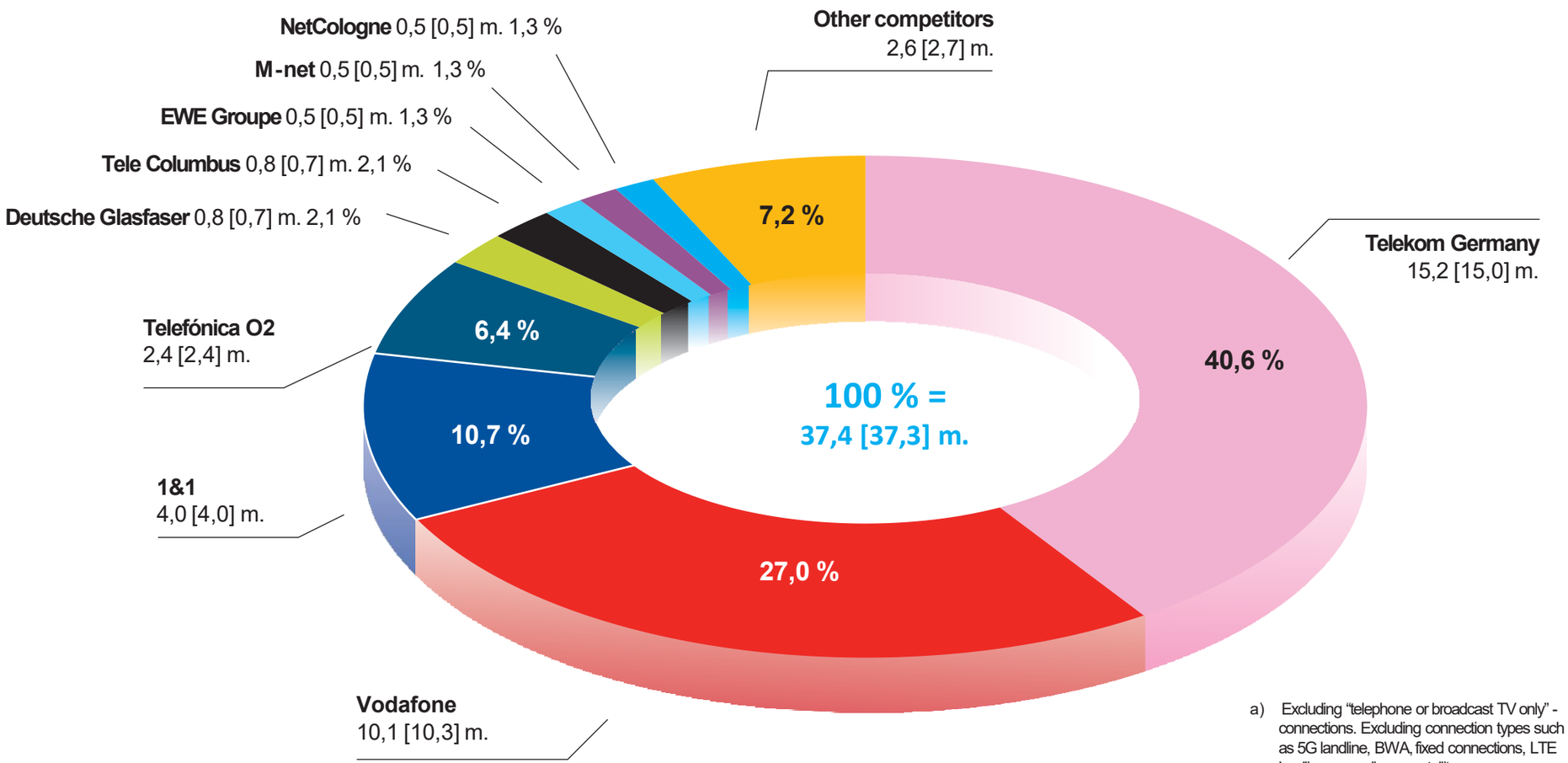
a) The figures are not always directly comparable, as the areas covered by the measures requested may be recorded very differently by the users.

*Chapter III*

# Fixed-line broadband connections

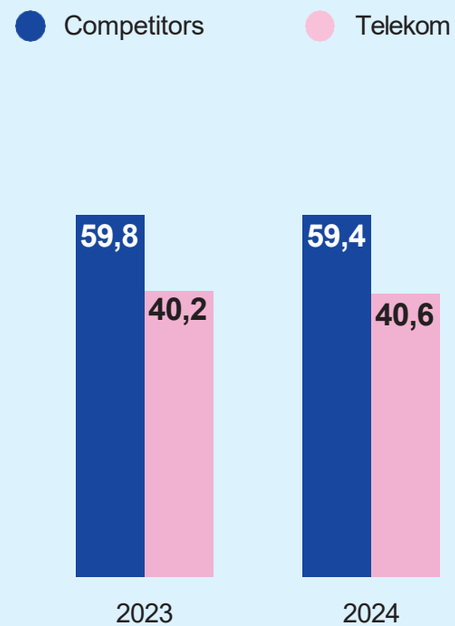
# Deutsche Telekom expands its retail market share to 40.6 per cent

**Fig. 8: Broadband customers[a] by company**
(As of: 31.12.2024)




a) Excluding "telephone or broadcast TV only" - connections. Excluding connection types such as 5G landline, BWA, fixed connections, LTE landline, powerline or satellite.

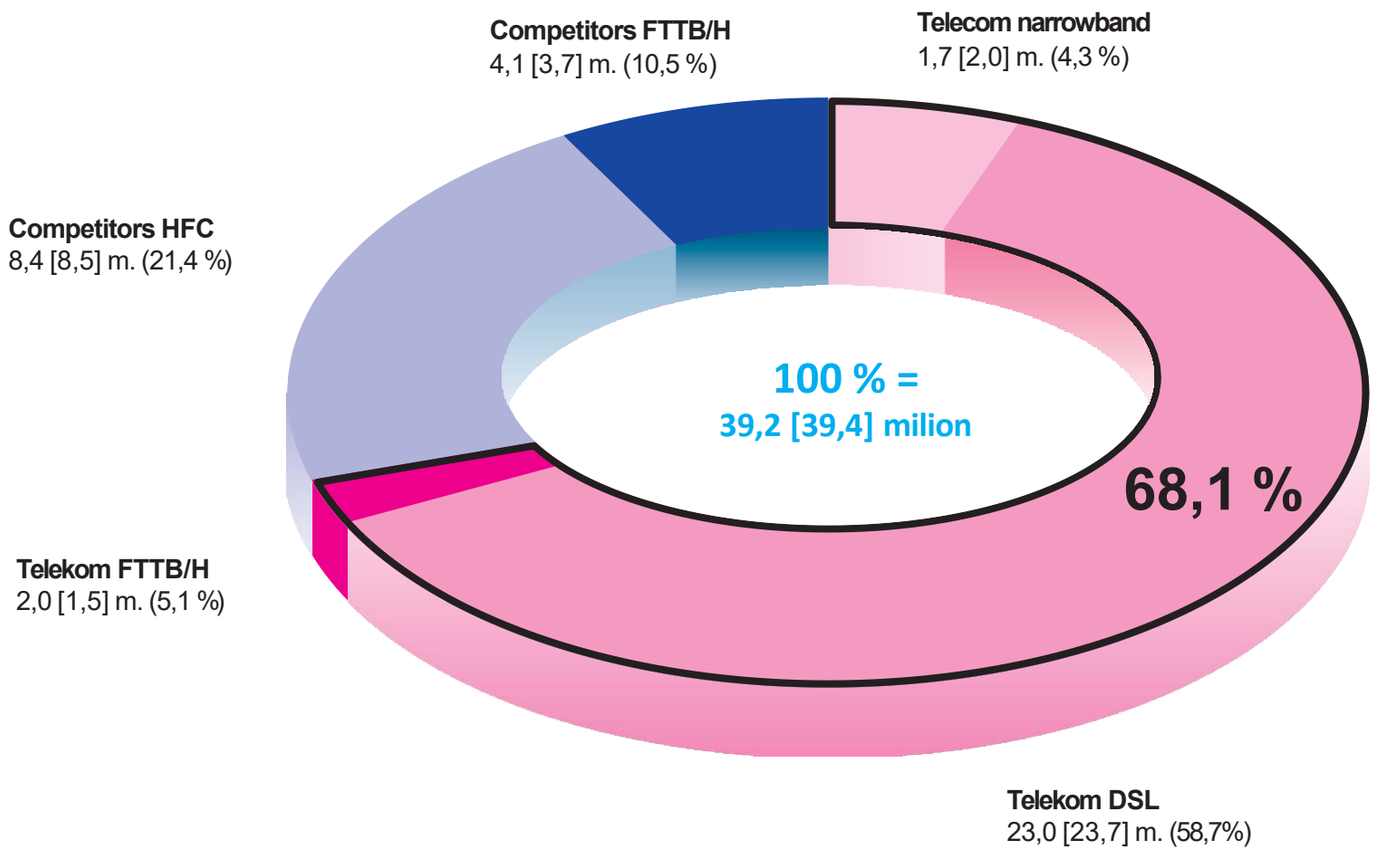
## Retail market share
**in percent**




Source: Company information

# Telekom dominates the german broadband market - nearly 70 per cent of all connections run over Deutsche Telekom's access networks: Effective regulation by BNetzA more important than ever

**Fig. 9: Actively used narrowband and broadband connections[a] by line ownership**
(Estimate for the end of 2025)



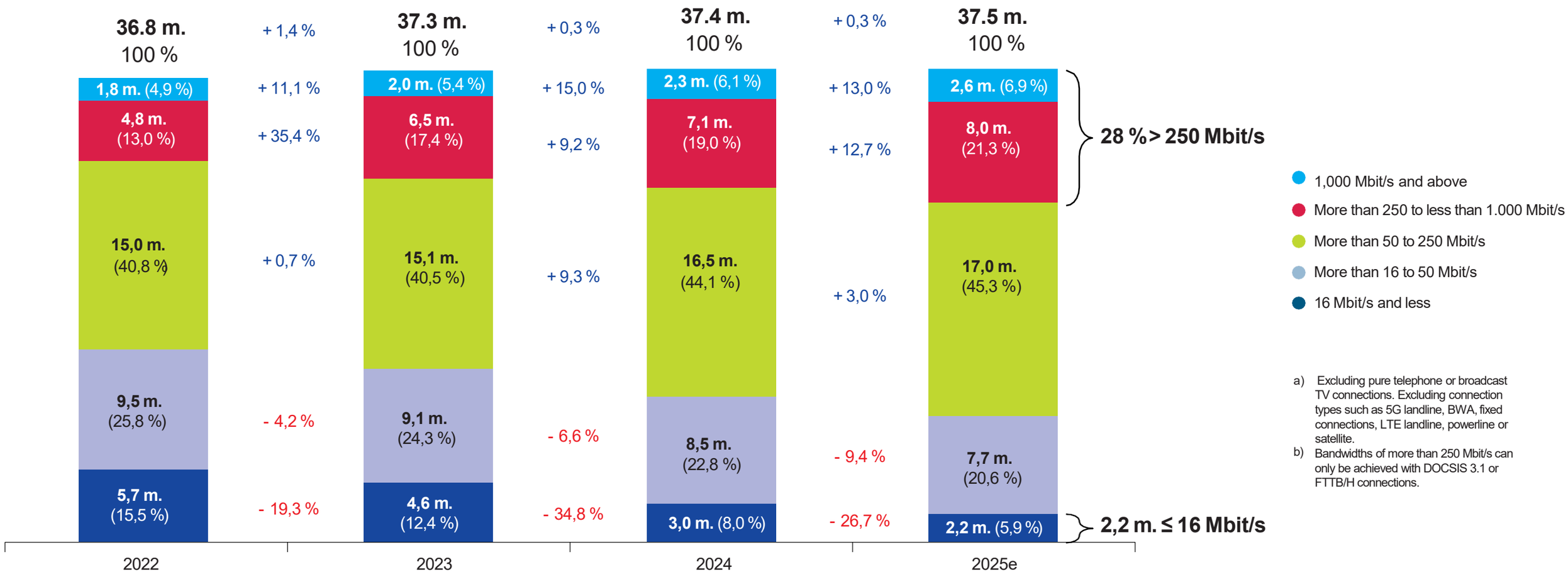

**Outlined Area = 68.1%**

- Predominantly depreciated copper lines
- 26.7 m. actively used access lines owned by Deutsche Telekom
- Deutsche Telekom earns money from its own end customers and from wholesale services

a) Excluding pure broadcast TV connections. Excluding connection types such as 5G landline, BWA, fixed connections, LTE landline, powerline or satellite.

# Demand for high-speed internet is growing significantly to over 28 per cent - yet there are still 2.2 m. connections with a maximum speed of 16 Mbps

**Fig. 10: Demand for broadband connections[a] by downstream bandwidth[b]**



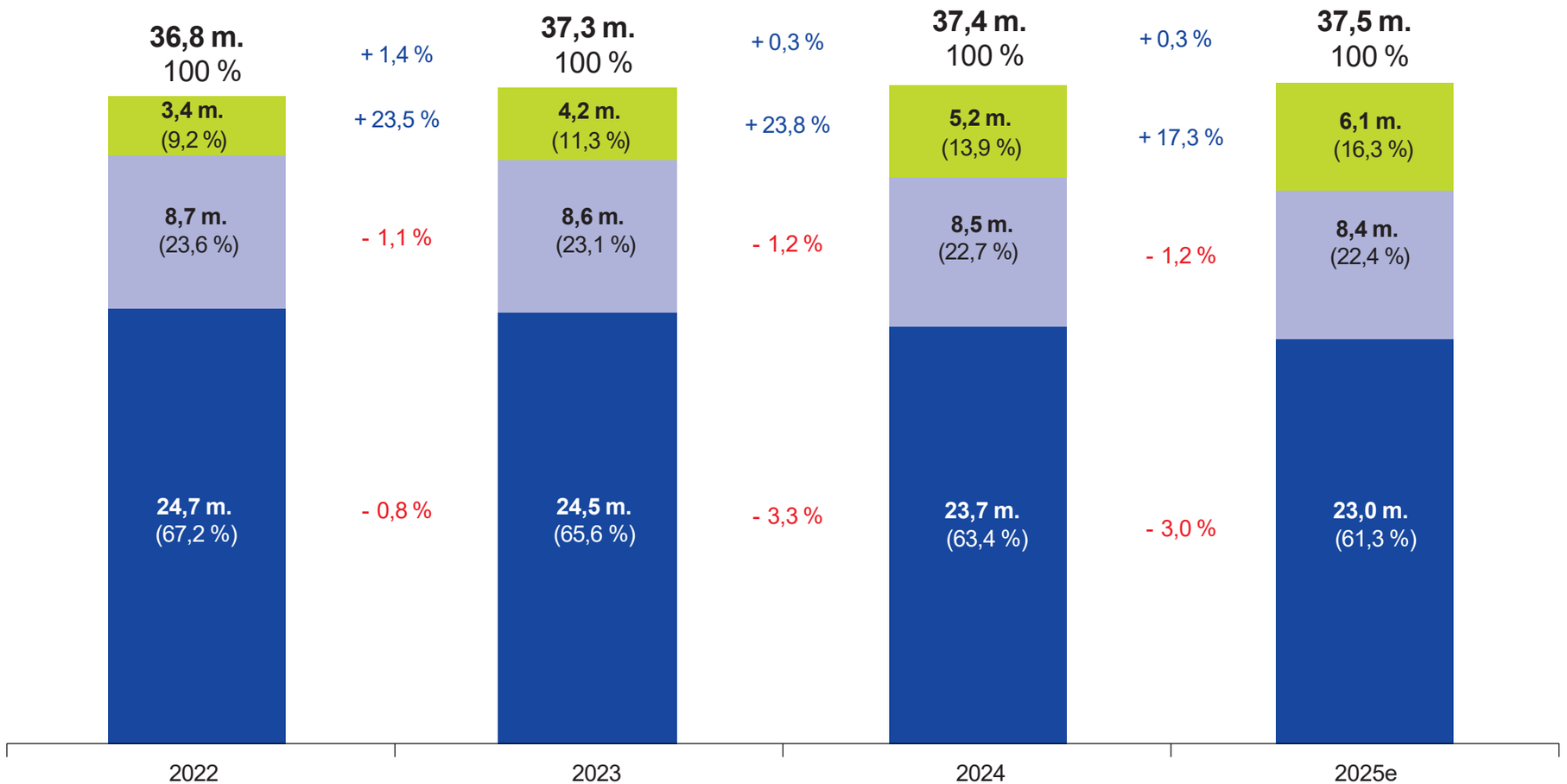

a) Excluding pure telephone or broadcast TV connections. Excluding connection types such as 5G landline, BWA, fixed connections, LTE landline, powerline or satellite.

b) Bandwidths of more than 250 Mbit/s can only be achieved with DOCSIS 3.1 or FTTB/H connections.

*Source: Company information*

# FTTB/H is growing significantly in the broadband market - copper-based DSL connections being replaced by fibre connections

**Fig. 11: Demand for broadband connections by network technology[a]**

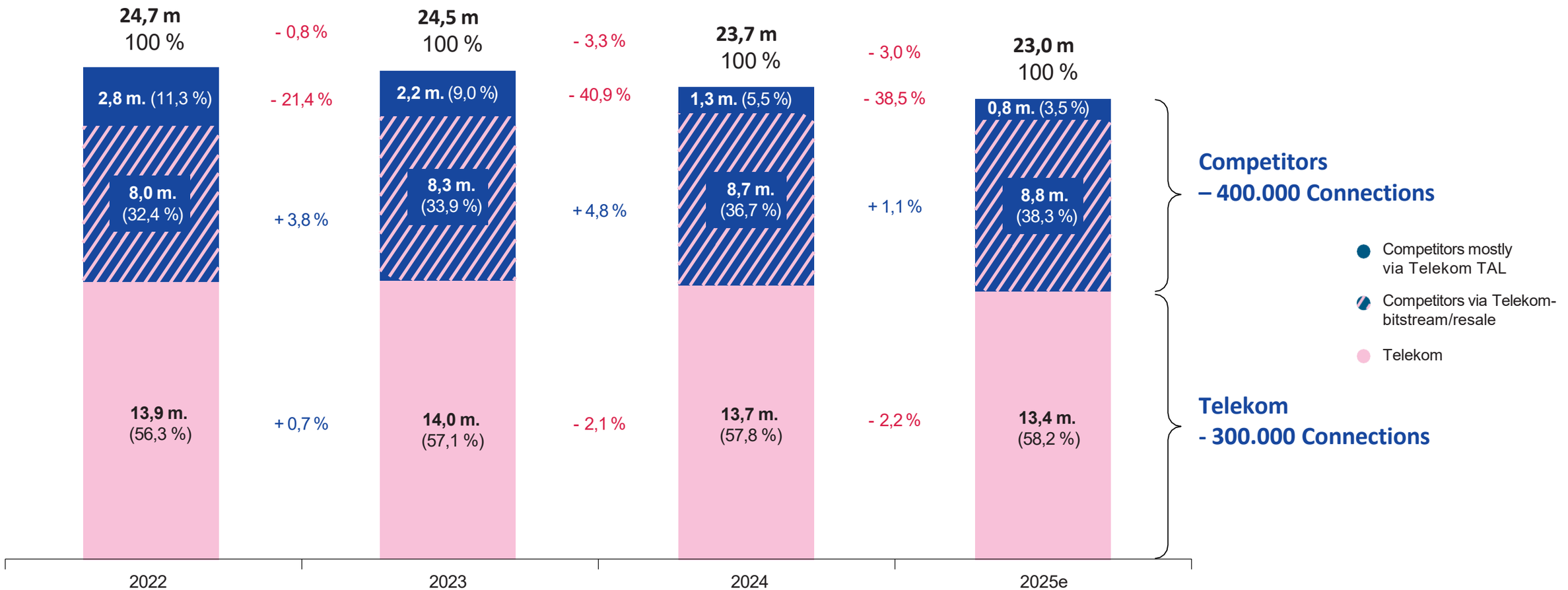



a) Excluding "telephone or broadcast TV only" - connections. Excluding connection types such as 5G landline, BWA, fixed connections, LTE landline, powerline or satellite.

Source: Company information

# Telekom is continuing to expand its market share in the DSL market, which will continue to dominate in the medium term – making pro-competitive regulations regarding the copper network shutdown by BNetzA more important.

**Fig. 12: Demand for DSL connections**



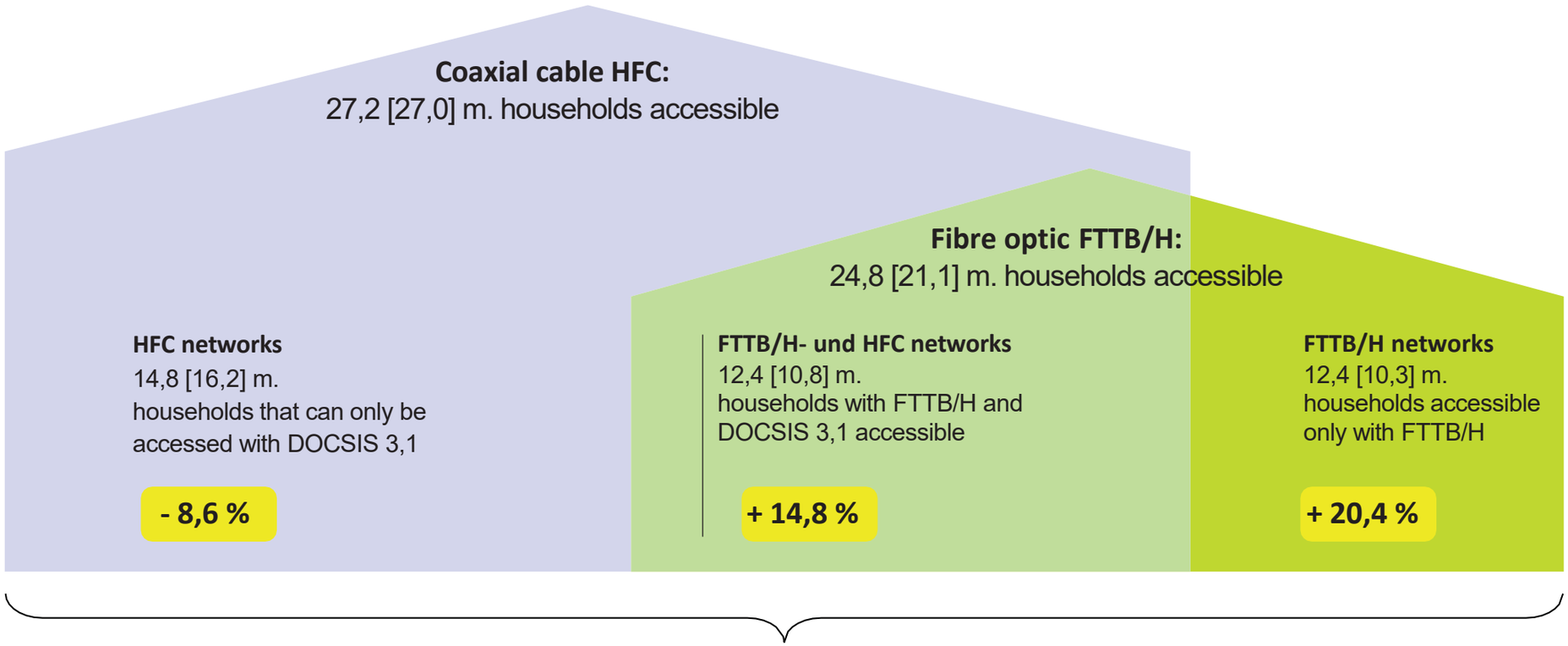

Source: Company information

*Chapter IV*

# Fibre connections

# By the end of 2025, over 86 per cent of all private households/SMEs in Germany will be connected to a gigabit-capable network (Homes Passed) – 24.8 m. households/SMEs will be accessible via fibre

**Fig. 13: Households/SMEs with Gigabit access (homes passed) at the end of 2025**
(estimated for 2025)

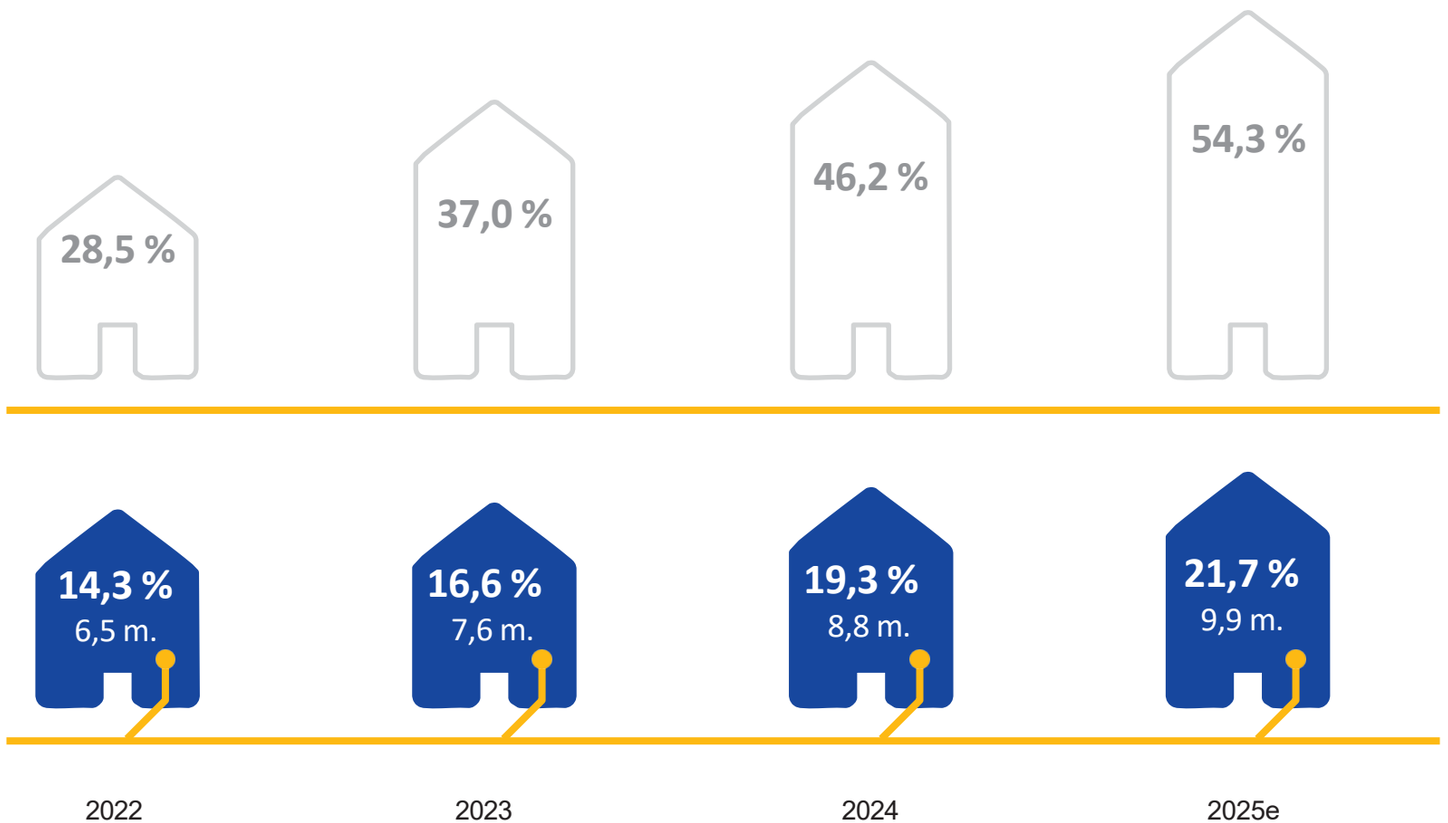



**39.6 [37.3] m. households and SMEs can be supplied with gigabit-capable connections**
(= 86.7 [81.6] % of all 45.7 m. private households/SMEs)

a) 45.7 m. units supplied. 42.0 m. private households (primary and secondary residences) and 3.7 m. small and medium-sized enterprises.

# The coverage rate of fibre (Homes Connected) will be 21.7 per cent by the end of 2025 – 61.6 per cent of these almost 10 m. fibre connections will be build by competitors

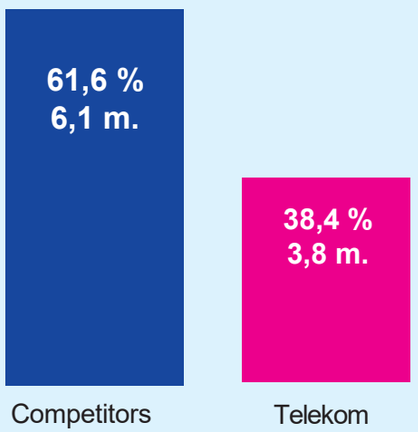
**Fig. 14: Accessibility rate Homes Passed and Supply rate[a] Homes Connected**
**Total number of households supplied**
(at the end of each year)




a) 45.7 m. units supplied. 42.0 m. private households (primary and secondary residences) and 3.7 m. small and medium-sized enterprises.

## Coverage rate

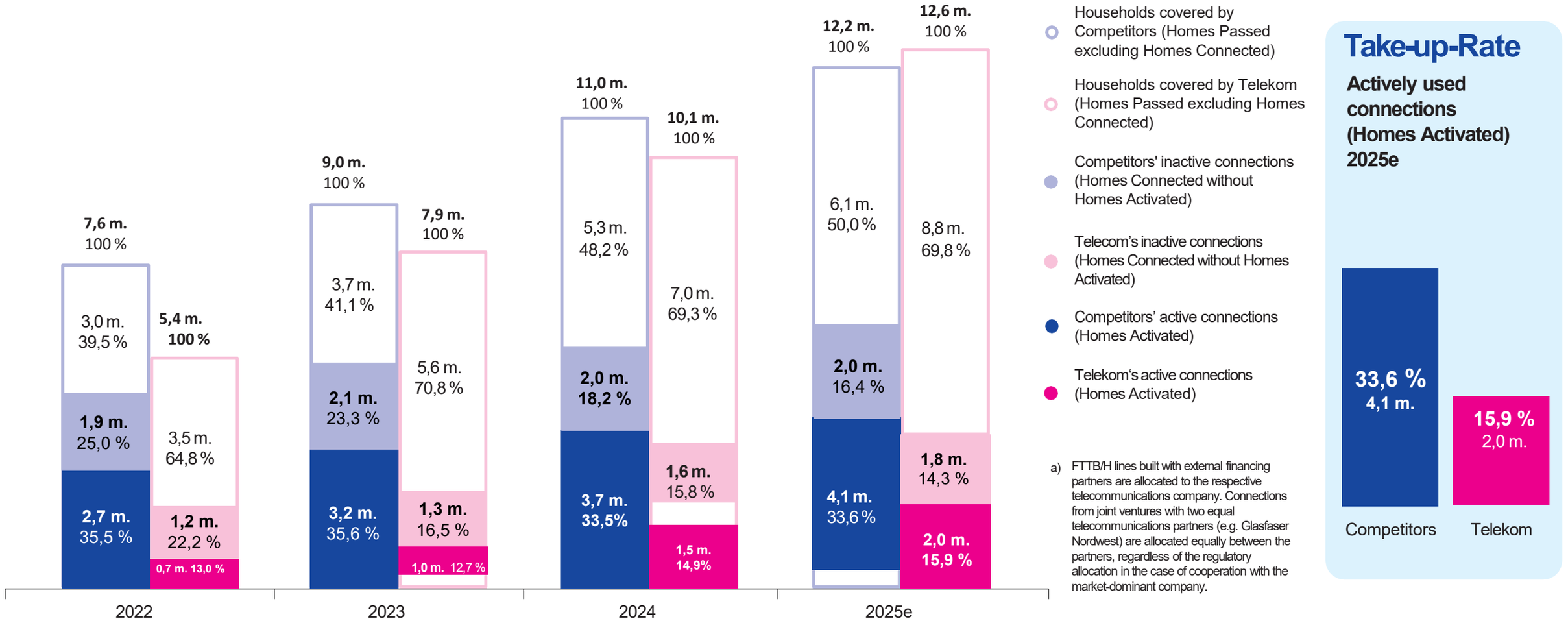
**with fiber connections (Homes Connected) 2025e**




Source: Company information, Statistical Federal Office

# Competitors have more than twice as many fiber customers as Telekom – Telekom relies on Homes Passed without connecting citizens

**Fig. 15: Households with fibre optic connectivity, coverage and take-up by providers[a]**
(at the end of each year)




a) FTTB/H lines built with external financing partners are allocated to the respective telecommunications company. Connections from joint ventures with two equal telecommunications partners (e.g. Glasfaser Nordwest) are allocated equally between the partners, regardless of the regulatory allocation in the case of cooperation with the market-dominant company.

## Take-up-Rate

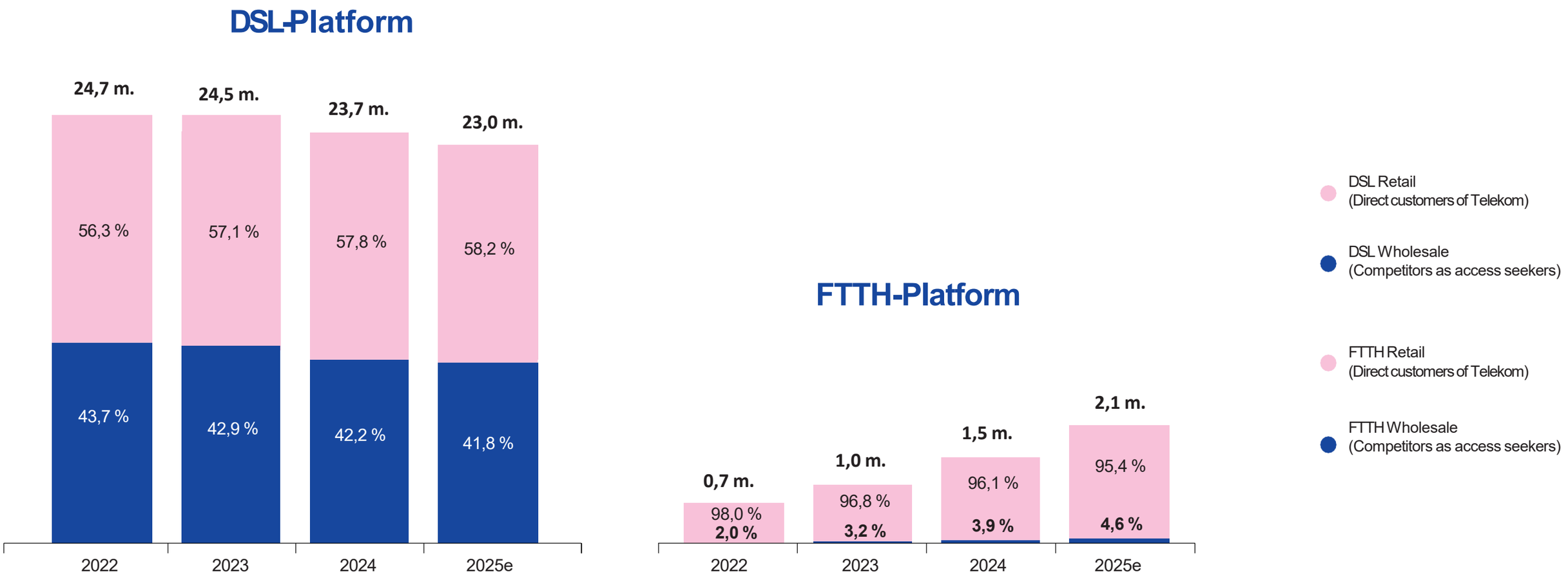
**Actively used connections (Homes Activated) 2025e**




Source: Company information

# The FTTH and DSL platforms of the market-dominant Telekom are insufficiently regulated – Telekom continues to expand its market share putting competitors under pressure

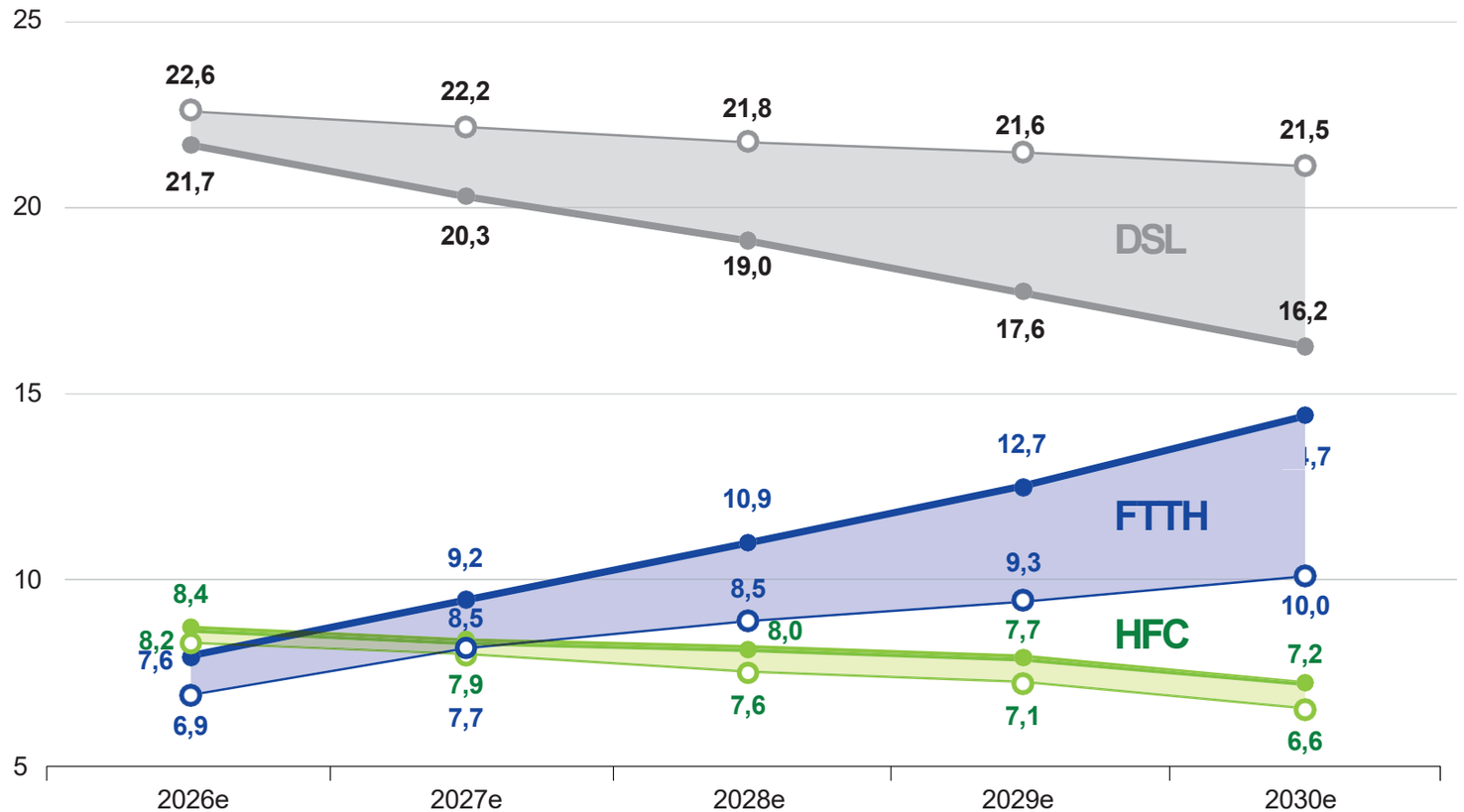
**Fig. 16: End-customer market shares on Telekom's DSL and FTTH platforms**
(Homes Activated, at the end of each year)




Source: Company information

# Even in an optimistic scenario of a ‘fibre push’ with 1.5 to 2.0 m. new FTTB/H connections (Homes Activated) per year, just under 15 m. connections will be in use by the end of 2030 – DSL will remain the most widely used connection technology until the end of the decade

**Fig. 17: Forecast of actively used broadband connections in the fixed network by technology**
(Homes Activated, at the end of each year)




**Pessimistic scenario**

## Sticking with copper

- FTTB/H growth < 1 m. p.a.
- Restrained growth of connection bandwidths
- Focus on expanding homes passed coverage (meets political expectations)

**Optimistic scenario**

## Fibre Push

- FTTB/H growth 1.5 - 2.0 m. p.a.
- Significant growth in connection bandwidths (also slightly boosting HFC)
- Emphasis on expanding homes connected infrastructure and the marketing of activated homes (meets citizens' expectations)

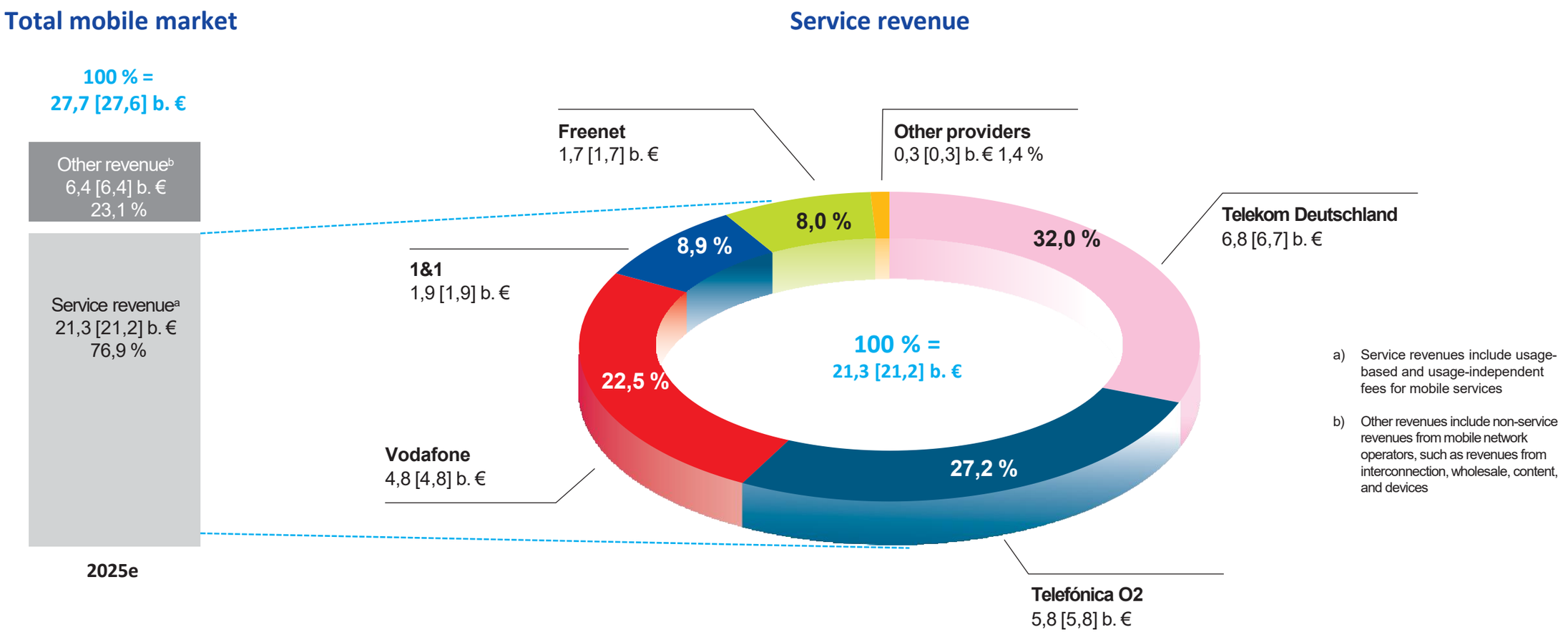
Source: DIALOG-CONSULT forecasts

*Chapter V*

# Mobile communications market

# More than three quarters of mobile phone revenues are generated by services – revenues remain stable

**Fig. 18: Structure of mobile communications revenues**
(Estimate for the full year 2025)



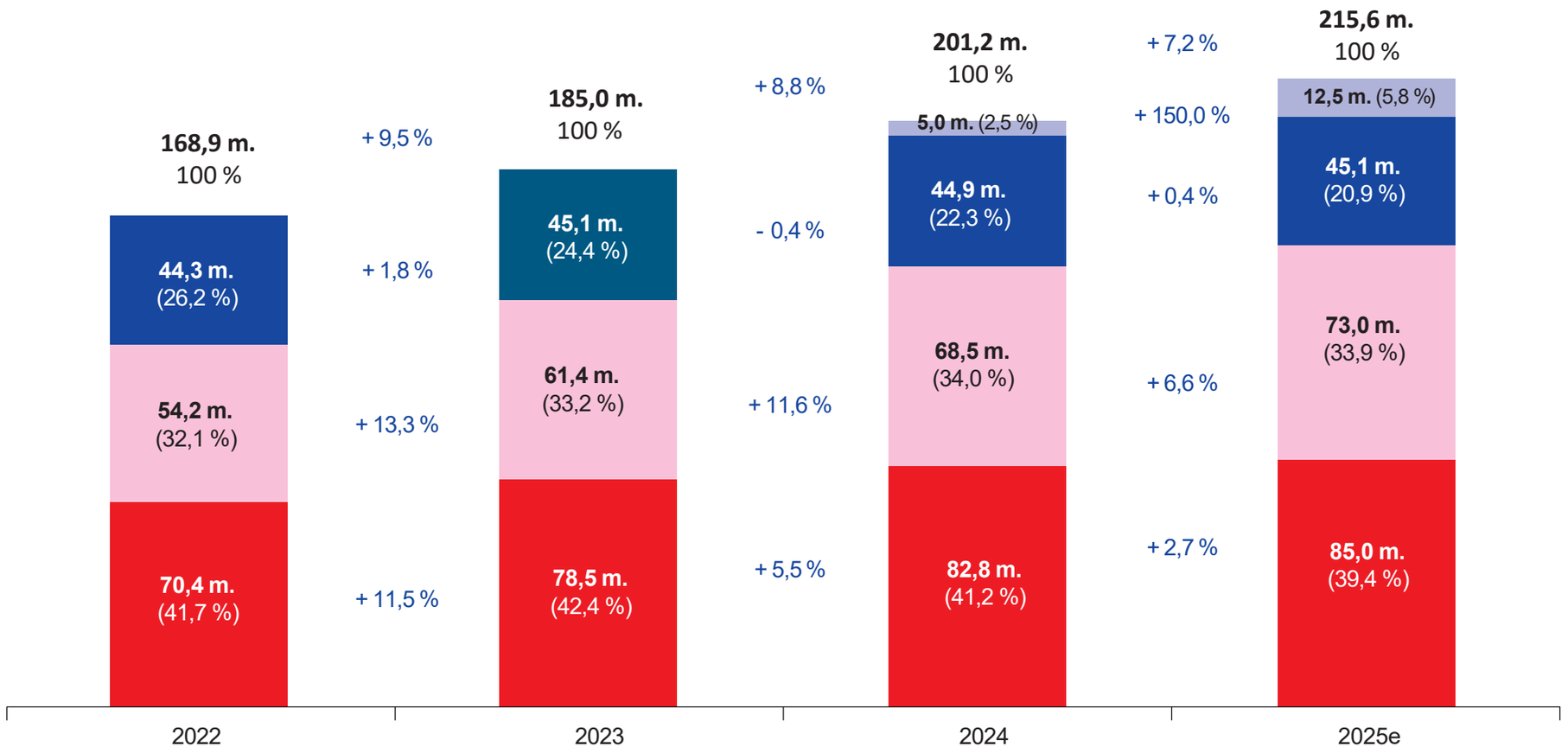

a) Service revenues include usage-based and usage-independent fees for mobile services

b) Other revenues include non-service revenues from mobile network operators, such as revenues from interconnection, wholesale, content, and devices

Source: Company information

# Number of SIM cards continues to grow, with an increase of 14.4 m. – the new entrant 1&1 is expected to reach a market share of just under 6 per cent this year

**Fig. 19: Number of SIM cards by mobile network[a]**
(including eSIM, M2M, MVNE, low-usage SIMb and SIM for stationary use, each at the end of the year)




a) Figures are not directly comparable due to different data collection periods for lightly used and inactive prepaid SIM cards.

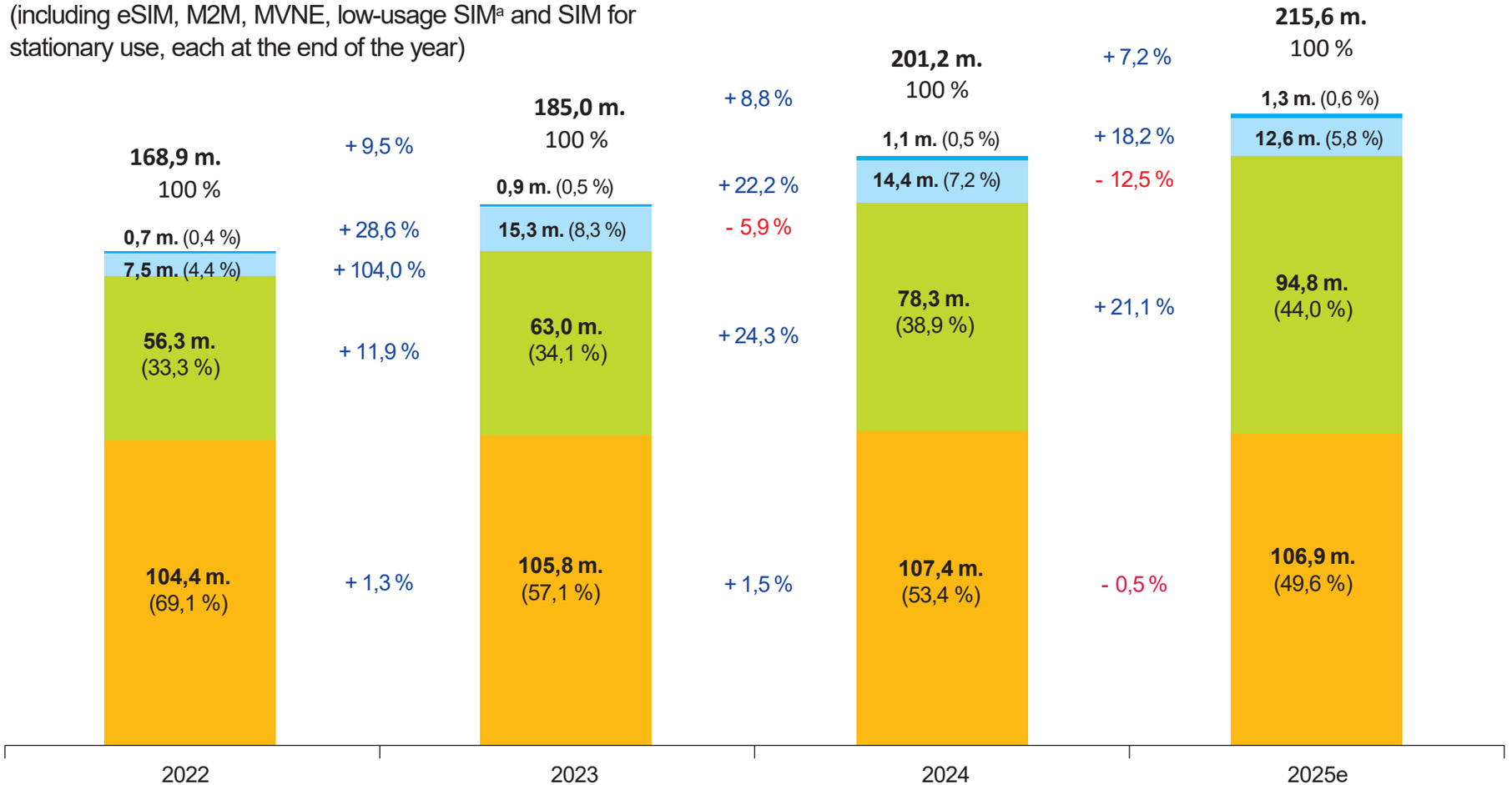
b) Figures are not directly comparable due to different data collection periods for lightly used and inactive prepaid SIM cards..

c) 1&1's growth is largely due to the migration of its 12.3 m. MVNO customers to its own network, which must be completed by 31 December 2025.

*Source: Company information*

# SIM card growth in the mobile market is driven by M2M applications – fixed wireless based on LTE/5G is still a niche application, but growing

**Fig. 20: Number of SIM cards by purpose of use**
(including eSIM, M2M, MVNE, low-usage SIM[a] and SIM for stationary use, each at the end of the year)

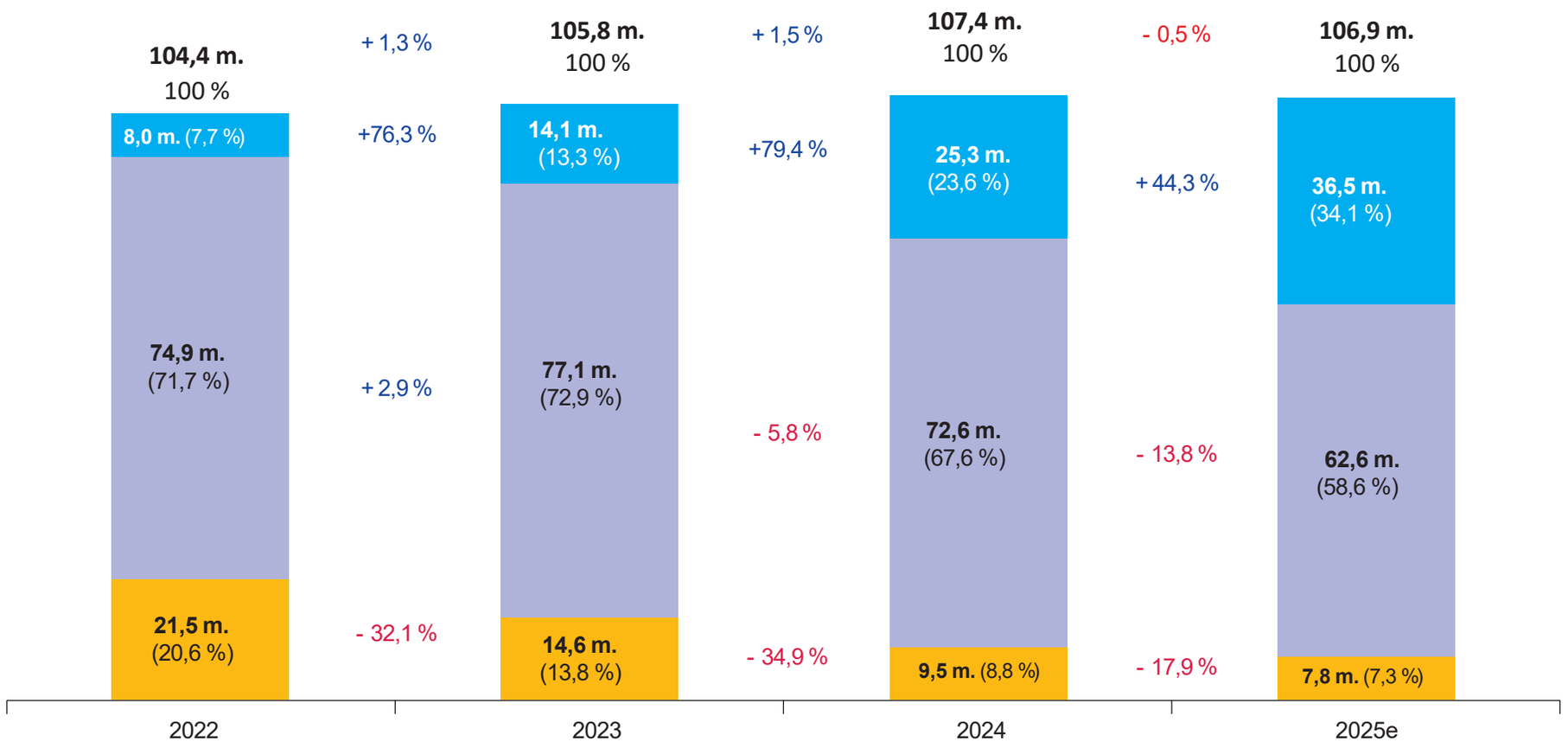



a) SIM cards that have not been used in the last three months or for which no invoice has been issued within three months.

Source: Company information

# For personally used active SIM cards, a saturation point will be reached when there are more than 1.2 cards per inhabitant – by the end of 2025, more than 90 per cent of all SIM cards will be broadband-capable

**Fig. 21: Number of active[a] SIM cards for personal mobile use by network generation**
(including eSIM and MVNE, at the end of each year)




**Average 1.27 SIMs per inhabitant**

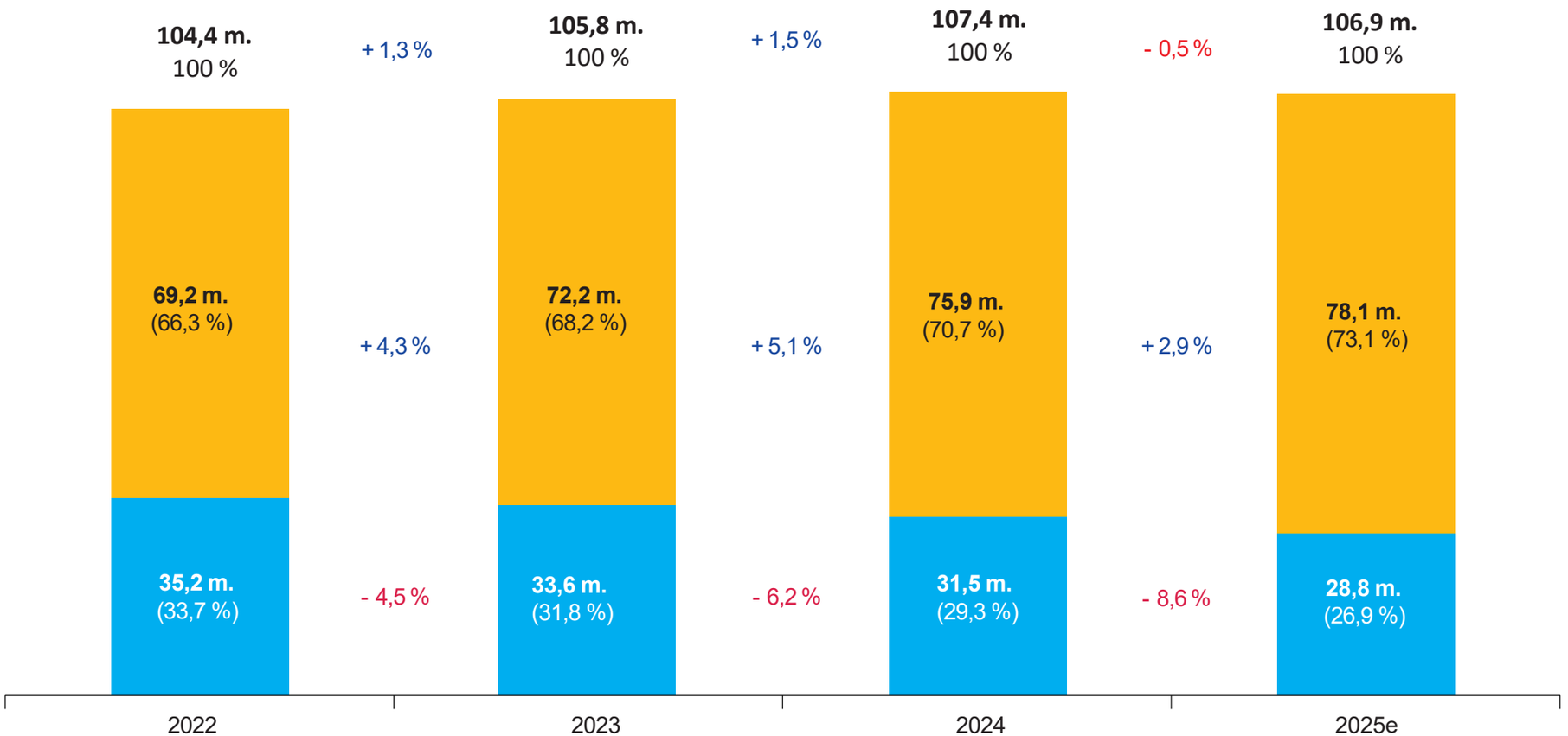
- 5G (NSA/SA)
- LTE/4G
- GSM/2G

a) SIM cards that have been used in the last three months. The number of actively used personal SIM cards has ranged between 104.4 and 109.7 m. since 2015.

*Source: Company information*

# With constant data availability, postpaid contracts continue to gain in attractiveness

**Fig. 22: Number of active[a] personal SIM cards by contract type**
(including eSIM and MVNE, excluding M2M SIM, low-volume and stationary use, at the end of each year)

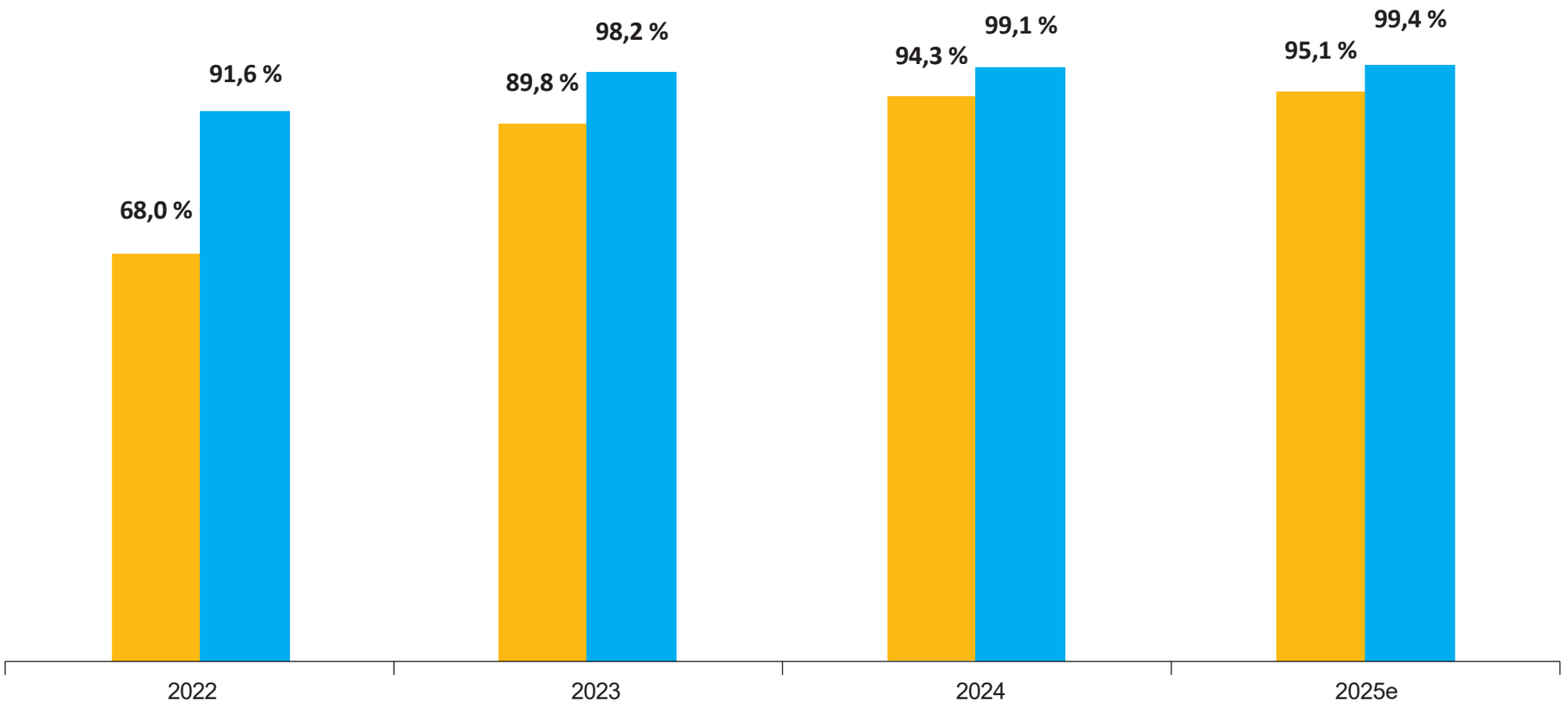



a) Personal SIM cards that have been used in the last three months.

Source: Company information

# 5G offering covers almost all households and most of Germany

**Fig. 23: Network coverage[a] with 5G mobile communications**
(at the end of each year)

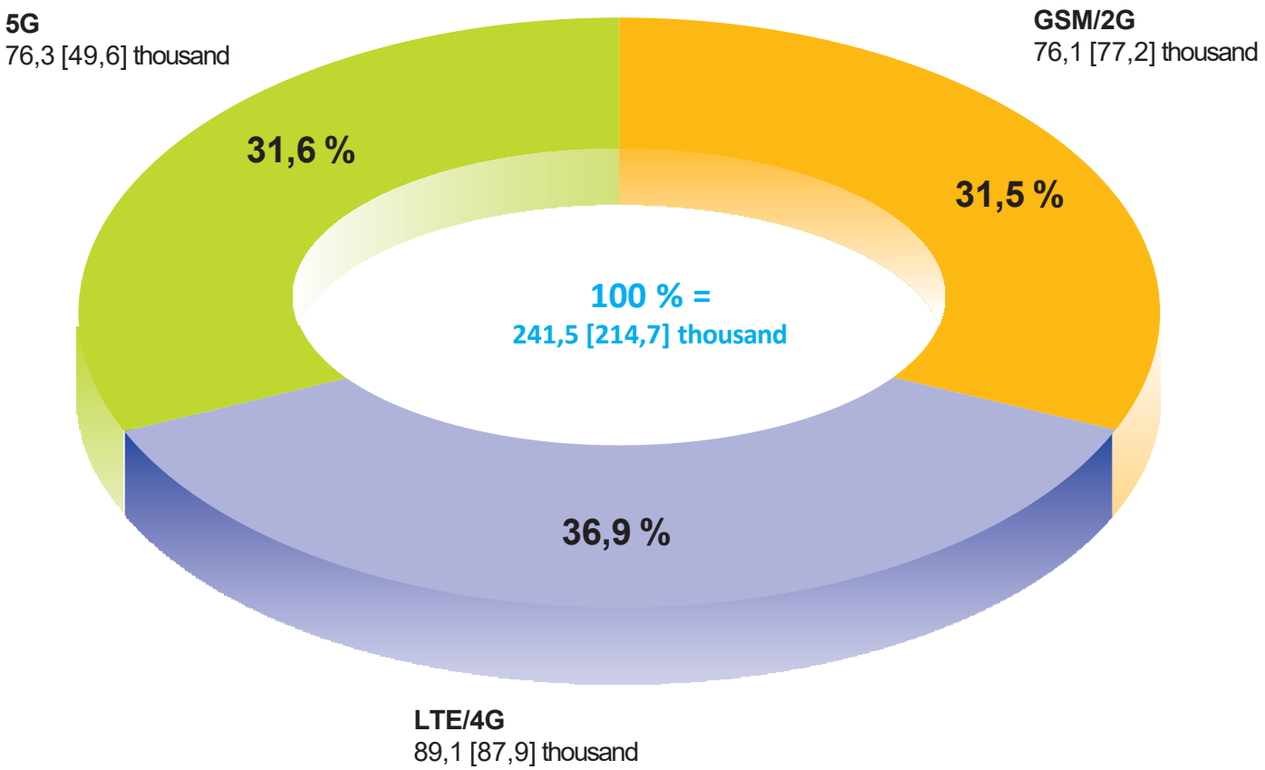



a) Outdoor coverage in terms of area or households by at least one network operator.

Source: BMDV, Company information

# The number of 5G base stations continues to grow – the pace of deployment is heavily dependent on approval processes

**Fig. 24: Number[a] of mobile phone base stations by technology**
(at the end of each year)




## Growth base stations

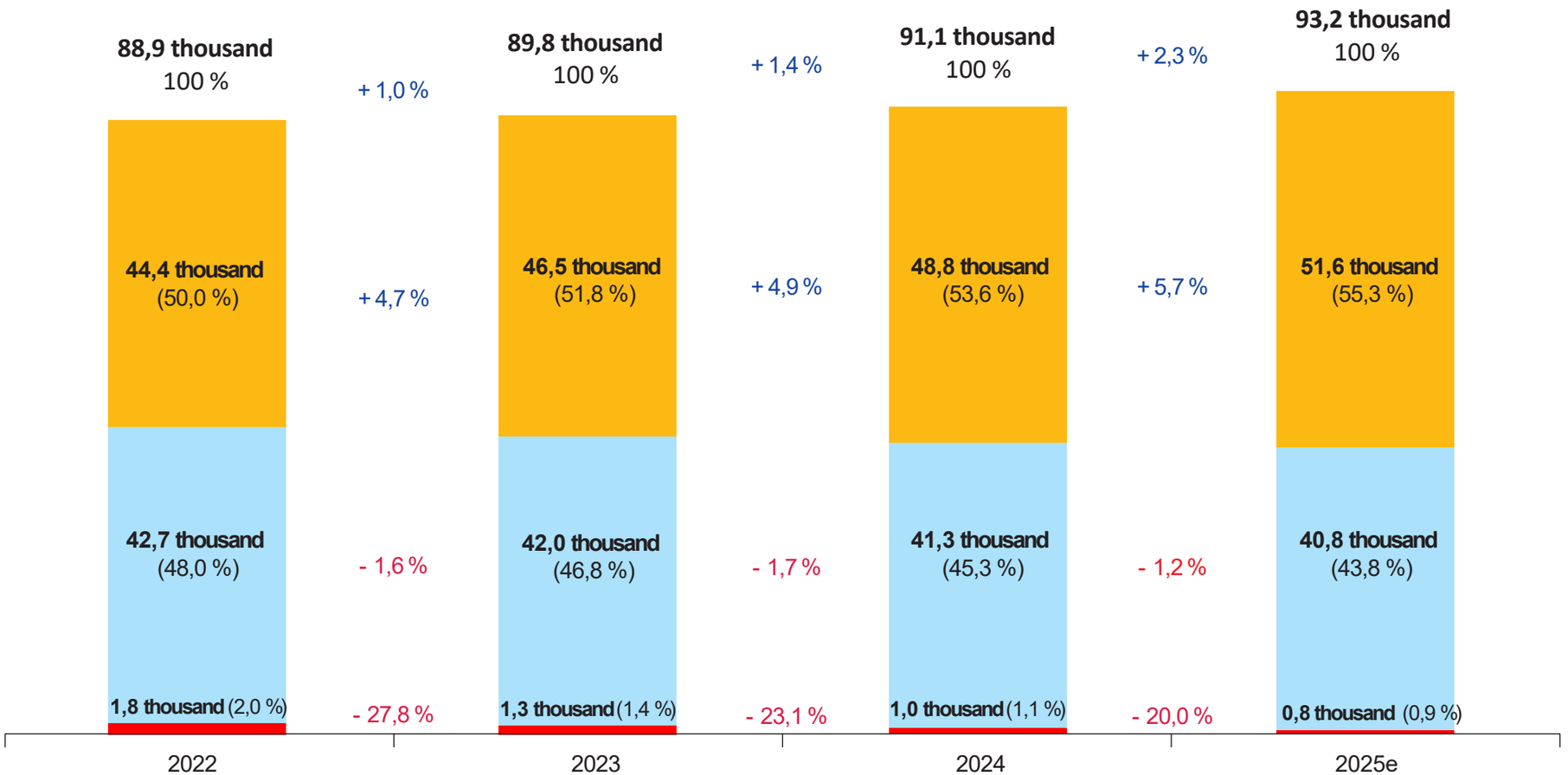
- 26,700 new base stations in 2024
- Mainly implemented as 5G Standalone (5G SA), enabling the benefits of 5G over LTE to be exploited
- Only approx. 2,500 base stations with 5G SA by the end of 2023

a) Some of the base stations are located at identical sites, which is why the number of mobile phone sites is lower.

*Source: BNetzA, Company information*

# Mobile network operators are continuously investing in connecting antenna sites with fibre – directional radio remains a fundamental technology for connectivity

**Fig. 25: Number[a] of mobile phone base stations by network connection**
(at the end of each year)




a) Some of the base stations are located at identical sites, which is why the number of mobile phone sites is lower.

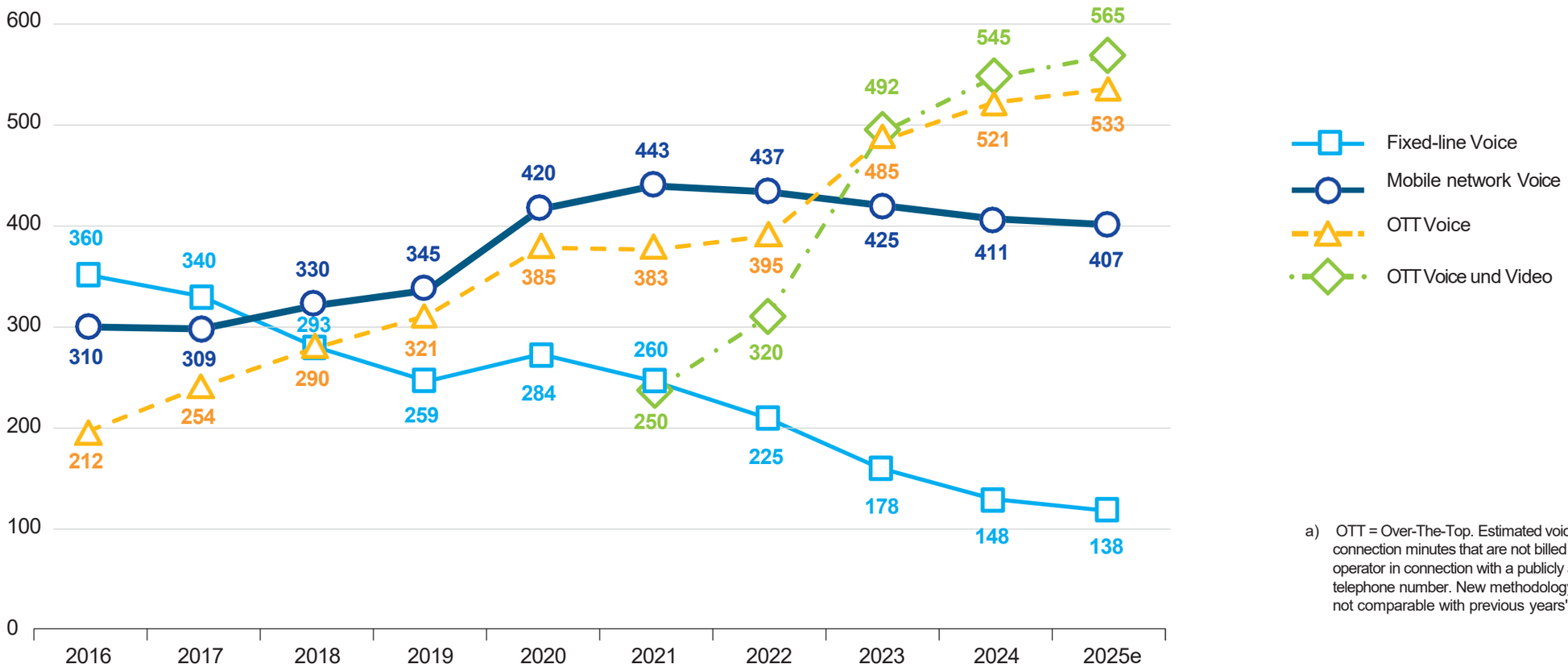
Source: BNetzA, Company information

*Chapter VI*

# Audio, video, and data transmission

# Most voice connections are made from non-phone number-based OTT apps

**Fig. 26: From landline, mobile and OTT apps[a] outgoing voice and video connection minutes**

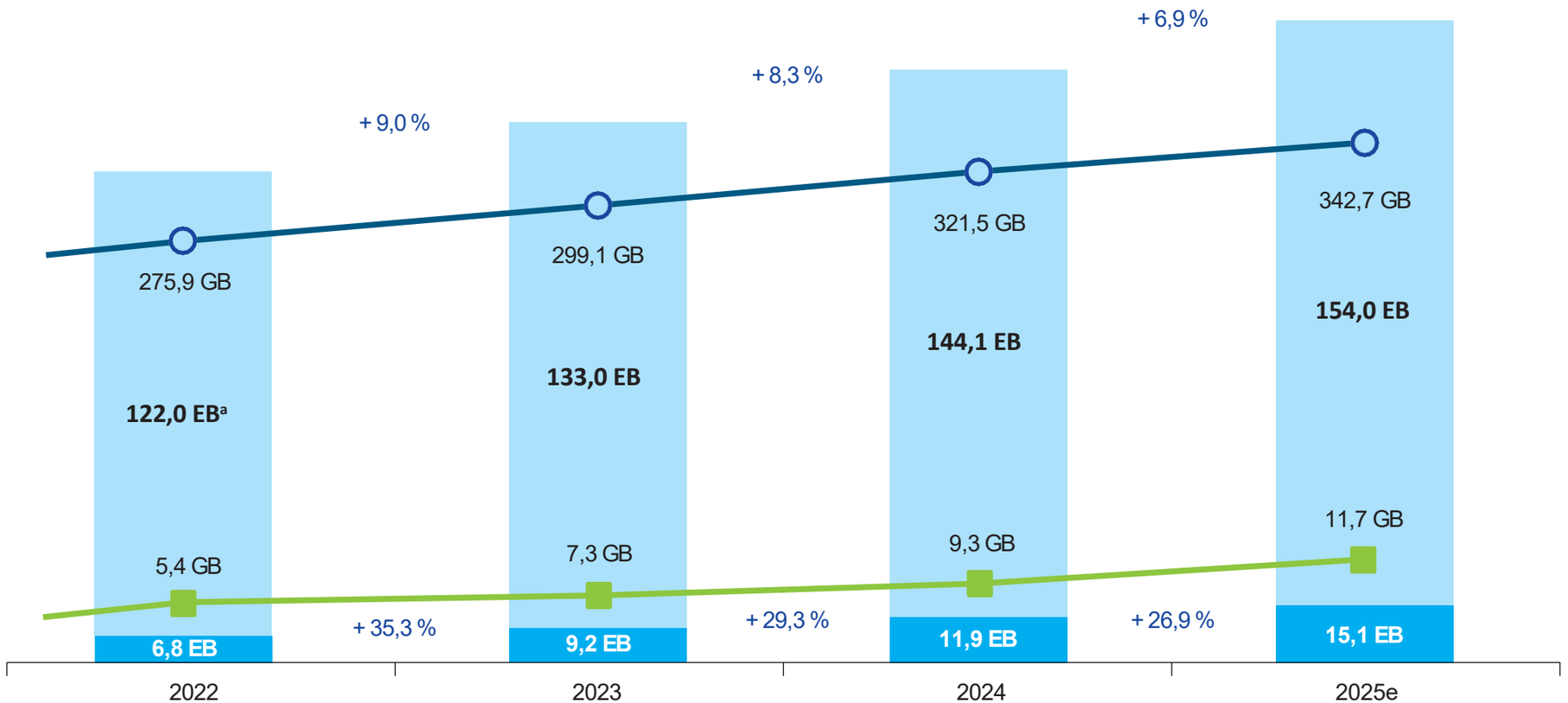



a) OTT = Over-The-Top. Estimated voice and video connection minutes that are not billed via a network operator in connection with a publicly assigned telephone number. New methodology is, therefore, not comparable with previous years' OTT estimates.

Source: Company information

# The amount of data transferred over fixed networks will increase by 21.2 gigabytes to 343 gigabytes per broadband connection – in mobile networks 11.7 gigabytes will be transferred per personal active SIM

**Fig. 27: Volume development of broadband Internet traffic on fixed and mobile networks**

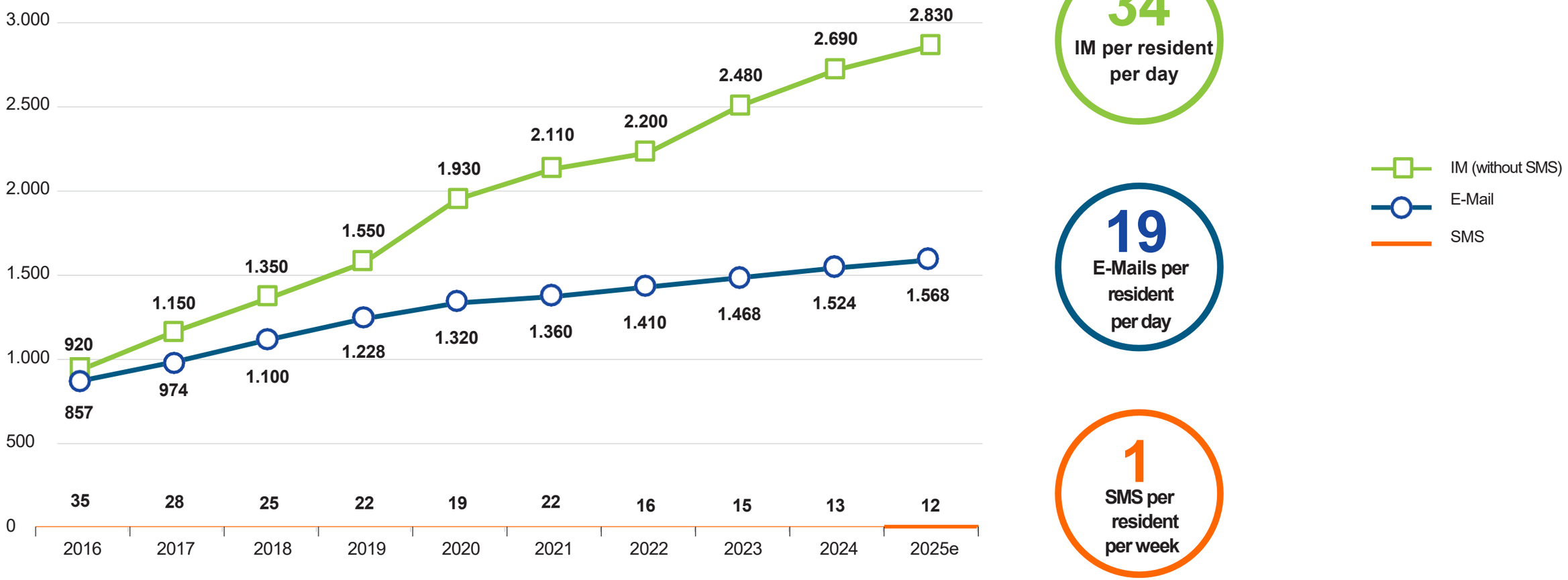



a) 1 EB = 1 exabyte = 1 billion gigabytes = 1 • 1015 bytes = 1,000,000,000,000,000 bytes.

Source: Company information

# Instant messaging via apps has become the most important form of communication for personal messaging

**Fig. 28: Messages transmitted through fixed-line networks, mobile networks, and OTT applications**
(in m.s per day)



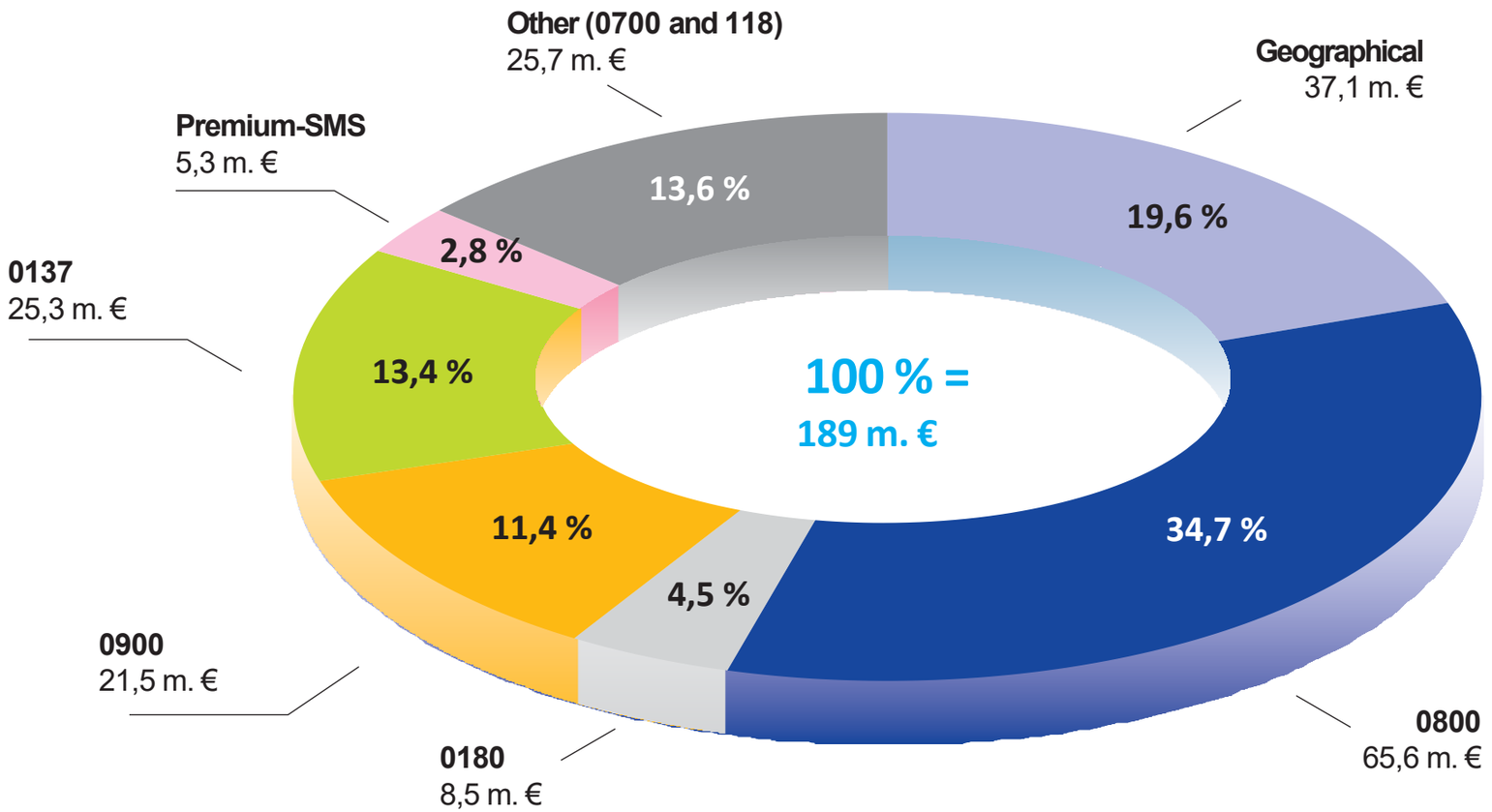

Source: Bitkom, Cisco, Company information

*Chapter VII*

# Digital services

# Nearly 55 percent of revenue from service numbers comes from 0800 numbers, which are free for end customers, and geographic numbers.

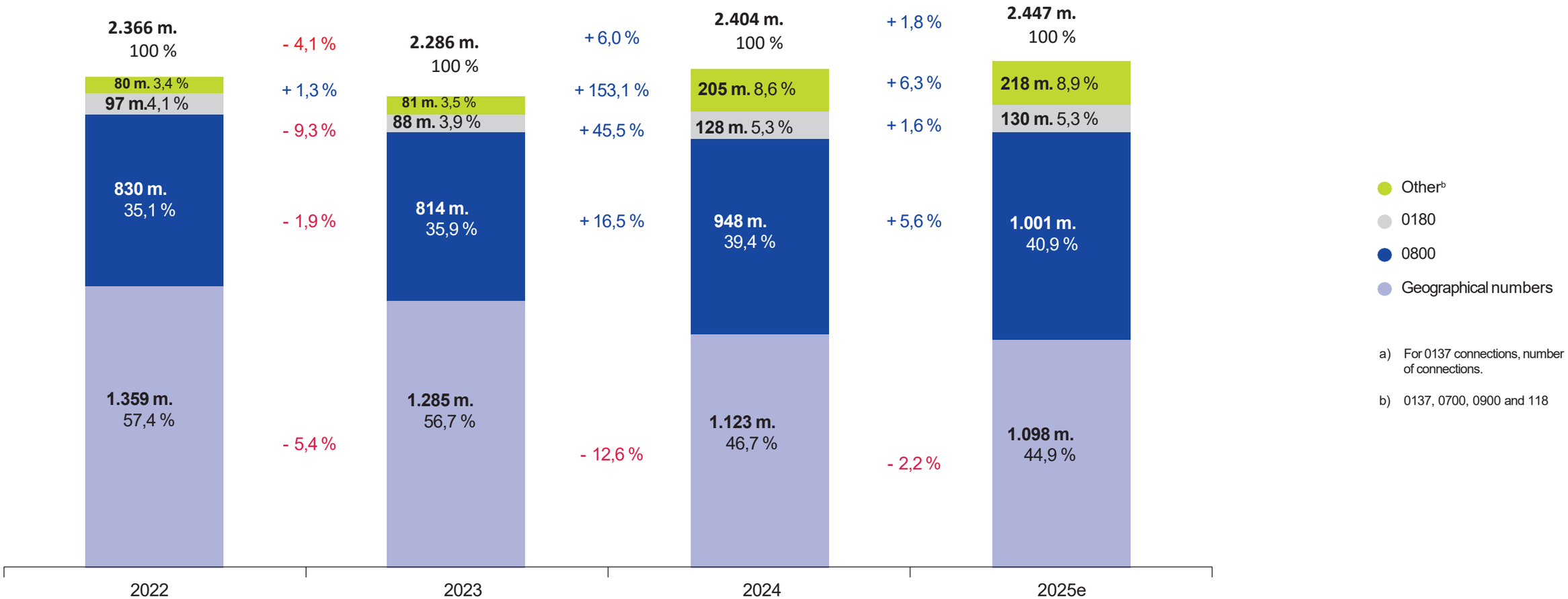
**Fig. 29: Competitors' revenues from service numbers, broken down by number ranges**
(Estimate for 2025)




Source: Company information

# Demand for number-based services appears to have stabilised at a solid level, with minutes of use rising slightly and growing business applications helping to sustain the market

**Fig. 30: Competitor minutes[a] with service numbers by number type**
(in minutes per year)




a) For 0137 connections, number of connections.

b) 0137, 0700, 0900 and 118

Source: Company information

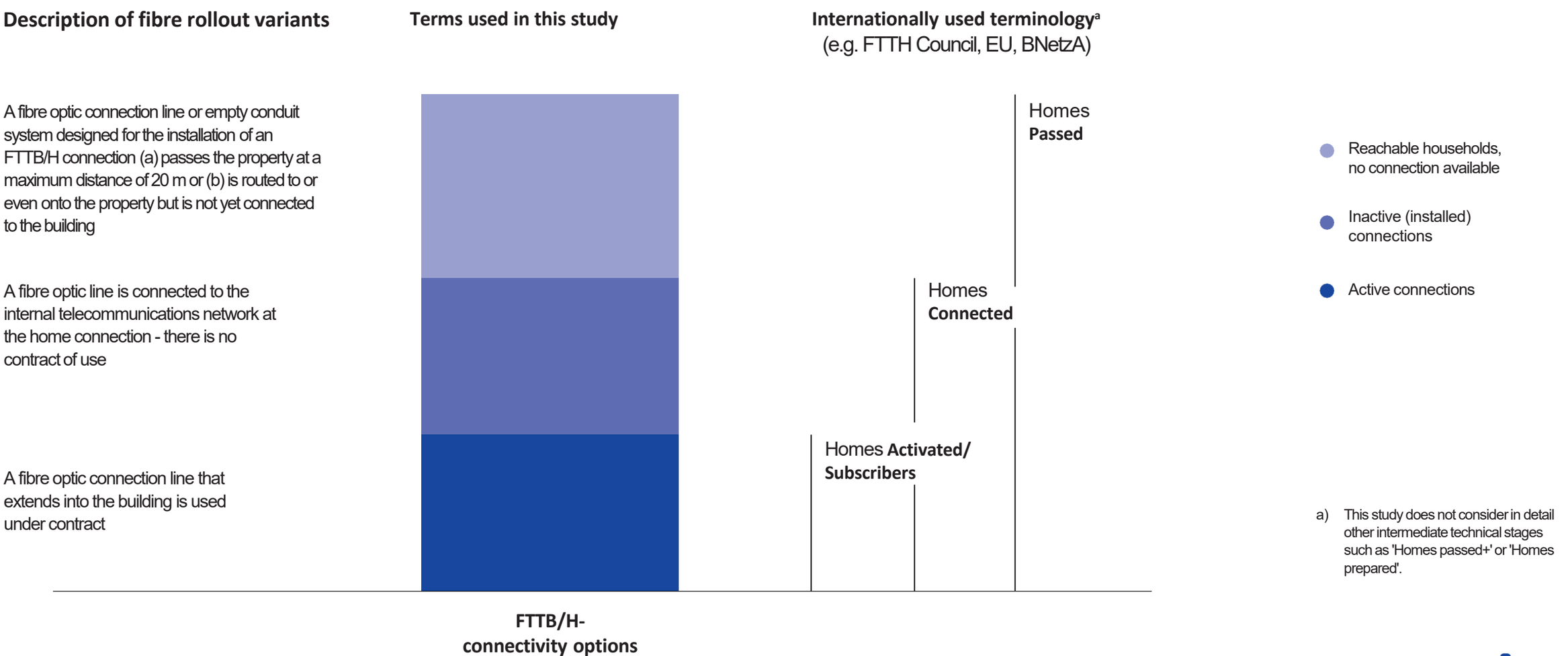
# Appendix

# Background to the 26th TK Market Analysis Germany 2025

- The 26th TK Market Analysis Germany 2025 analyses the most important areas of the German telecommunications market
- The analysis is based on the evaluation of the following sources:
  - **Written survey of VATM member companies and other major telecommunications network operators** in February and March 2025
  - **Company publications, financial reports** and **press releases**
  - Publicly available studies (e.g. FTTH Council Europe, BNetzA)
  - Press articles and expert interviews
- Among competitors in the German telecommunications market, VATM member companies provide **more than 85 per cent of fixed-line connections and all mobile connections of all competitors**
- VATM member companies account for **more than 90 per cent of the capital expenditure of all competing companies**
- Competing companies in the German telecommunications market generate **more than 97 percent of mobile revenues** and **more than 90 percent of fixed-line revenues of all competing companies**
- The companies' revenues include **service revenues, inter-carrier revenues** and **revenues from hardware and content**
- **Gigabit-capable connections** can technically offer downlink bandwidths of at least **1 Gbit/s** – this includes HFC connections using the DOCSIS 3.1 standard and FTTB/H connections, but not (V)DSL and mobile connections
- A connection is considered gigabit-capable based on **its ability to deliver** speeds of at least 1Gbit/s, **regardless** whether customers actually subscribe to that bandwidth

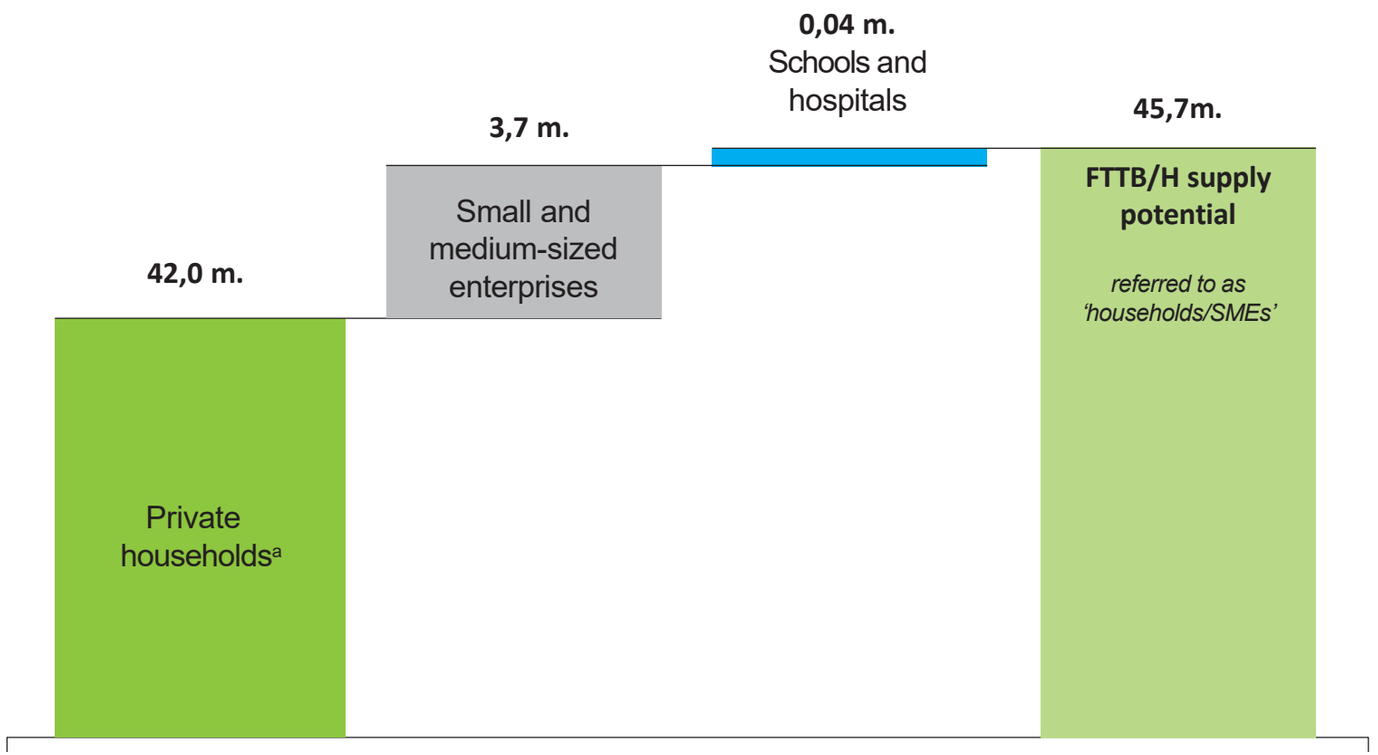
# Definitions

**Fig.: Definitions for the FTTB/H range**




a) This study does not consider in detail other intermediate technical stages such as 'Homes passed+' or 'Homes prepared'.

# FTTB/H supply potential




**Explanation:**
In addition to private households, small and medium-sized enterprises (SMEs), schools and hospitals are also potential customers for FTTB/H connections – large companies and public authorities are already supplied with dedicated fibre optic connections

a) Main and secondary residences

Source: Statistical Federal Office

# FTTB/H key figures

(at the end of each year, in millions)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **HP** | **6,0** | **8,9** | **13,0** | **16,9** | **21,1** | **24,8** | |
| - Competitors | 3,8 | 5,6 | 7,6 | 9,0 | 11,0 | 12,2 | **49,2%** |
| - Telekom | 2,2 | 3,3 | 5,4 | 7,9 | 10,1 | 12,6 | **50,8%** |
| **HP without HC** | **1,5** | **3,4** | **6,5** | **9,3** | **12,3** | **14,9** | |
| - Competitors | 0,5 | 1,8 | 3,0 | 3,7 | 5,3 | 6,1 | |
| - Telekom | 1,0 | 1,6 | 3,5 | 5,6 | 7,0 | 8,8 | |
| **HC** | **4,5** | **5,5** | **6,5** | **7,6** | **8,8** | **9,9** | |
| - Competitors | 3,3 | 3,8 | 4,6 | 5,3 | 5,7 | 6,1 | **61,6%** |
| - Telekom | 1,2 | 1,7 | 1,9 | 2,3 | 3,1 | 3,8 | **38,4%** |
| **HC without HA** | **2,6** | **2,9** | **3,1** | **3,4** | **3,6** | **3,8** | |
| - Competitors | 1,8 | 1,7 | 1,9 | 2,1 | 2,0 | 2,0 | |
| - Telekom | 0,8 | 1,2 | 1,2 | 1,3 | 1,6 | 1,8 | |
| **HA** | **1,9** | **2,6** | **3,4** | **4,2** | **5,2** | **6,1** | |
| - Competitors | 1,5 | 2,1 | 2,7 | 3,2 | 3,7 | 4,1 | **67,2%** |
| - Telekom | 0,4 | 0,5 | 0,7 | 1,0 | 1,5 | 2,0 | **32,8%** |
| **Availability rate HP** | **13,1%** | **19,5%** | **28,4%** | **37,0%** | **46,2%** | **54,3%** | |
| **Supply rate HC** | **9,8%** | **12,0%** | **14,2%** | **16,6%** | **19,3%** | **21,7%** | |
| **Take-up-Rate** | **31,7%** | **29,2%** | **26,2%** | **24,9%** | **24,6%** | **24,6%** | |
| - Competitors | 39,5% | 37,5% | 35,5% | 35,6% | 33,6% | 33,6% | |
| - Telekom | 18,2% | 15,2% | 13,0% | 12,7% | 14,9% | 15,9% | |
| | **2020** | **2021** | **2022** | **2023** | **2024** | **2025e** | |

Source: Company information

# List of abbreviations

| | |
|---|---|
| **NIPL** | National Infrastructure Pipeline Locator |
| **FMDT** | Federal Ministry for Digital and Transport |
| **BNetzA** | Federal Network Agency for Electricity, Gas, Telecommunications, Post and Railway |
| **BWA** | Broadband Wireless Access |
| **DOCSIS** | Data Over Cable Service Interface Specification |
| **e** | estimated |
| **EB** | Exabyte |
| **EU** | European Union |
| **EW** | Einwohner (residents) |
| **FTTB** | Fiber-to-the-Building |
| **FTTH** | Fiber-to-the-Home |
| **FTTC** | Fiber-to-the-Curb (VDSL) |
| **Gbit** | Gigabit |
| **GB** | Gigabyte |
| **HFC** | Hybrid Fibre Coax |
| **IM** | Instant Messaging |
| **SME** | Small and Medium-sized Enterprises |
| **LTE** | Long Term Evolution |
| **M2M** | Machine-to-Machine |
| **Mbit** | Megabit |
| **m.** | million |
| **b.** | billion |
| **MVNE/O** | Mobile Virtual Network Enabler/Operator |
| **VAT** | Value Added Tax |
| **OTT** | Over-The-Top |
| **NSA** | Non stand alone (5G) |
| **s** | second |
| **SA** | Stand alone (5G) |
| **SIM** | Subscriber Identity Module |
| **SMS** | Short Mesage Service |
| **LLU** | Local Loop Unbundling |
| **t** | thousand |
| **VDSL** | Very High Speed Digital Subscriber Line |