

# Transforming Connectivity: Azerbaijan's Digital Journey (2020–2025) From Copper Networks to Fiber-Optic Infrastructure

Dr. Samir Orujov  
Head of Statistics Division  
Information and Communication Technologies Agency

Azerbaijan Hospitality Connectivity Summit

January 27, 2026

# World Bank B-READY 2025: Azerbaijan Recognized

## World Bank Business Ready 2025 Communal Services & Digital Infrastructure

- ✓ **#5 Globally** — Operational Effectiveness Internet Sub-Indicator (Top 5/101 economies)
- ✓ **#1 Regional Leader** — Regulatory Framework Among peer economies
- ✓ **Score: 83.05/100** — Communal Services Ranked #25 out of 101 economies

### Key Recognition

*Internet = Essential Infrastructure  
(like electricity, water, transport)*

## For Hospitality & Tourism

- Infrastructure parity with developed destinations
- Can support premium guest services
- De-risked for investors
- Regional competitive advantage

### Today's Story

#### How did we achieve this?

What does it mean for Azerbaijan's tourism future?

Source: World Bank Business Ready (B-READY) 2025 Report | October 2025

## 1 The Starting Point

## 2 Mobile Connectivity Progress

## 3 Fixed Broadband: The Main Story

## 4 Impact & Achievements

## 5 Future Outlook

# Where We Started: A Digital Divide (2020)

## Infrastructure Challenges

- Fiber coverage: **only 9%**
- 227K premises with access
- Legacy ADSL/DSL dominant
- 150+ fragmented ISPs

## Digital Divide

- National avg: ~76%
- Rural: ~46%
- **Gap:** ~30 pp
- Rural: 45.5% population

## Performance Baseline

- Download: **10.5 Mbps**
- Upload: **11.1 Mbps**
- Inadequate for modern use

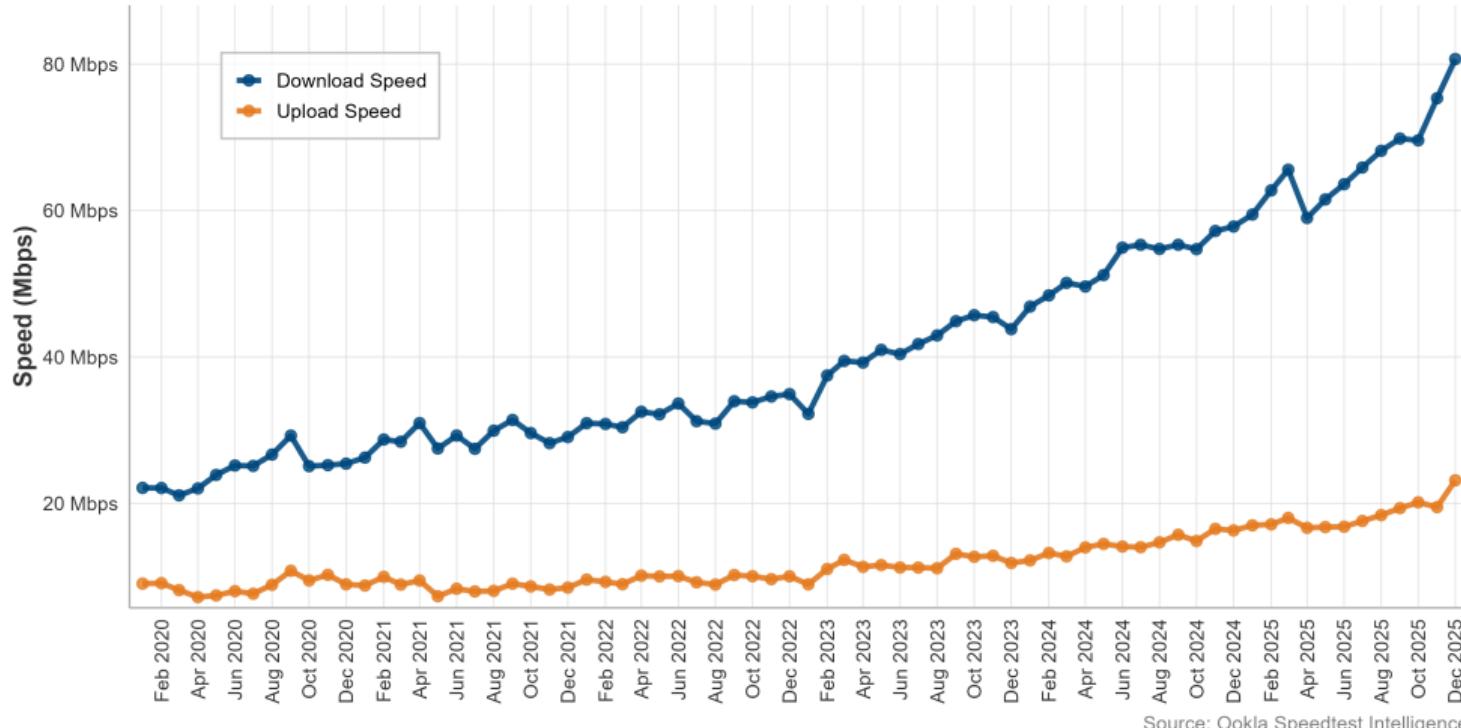
### Key Insight

*Connectivity was fragmented, slow, and spatially unequal.*

# Mobile/Cellular: Download & Upload Speed Evolution

## Azerbaijan Mobile/Cellular Speed Evolution

Median download and upload speeds reflecting network improvements (2020-2025)

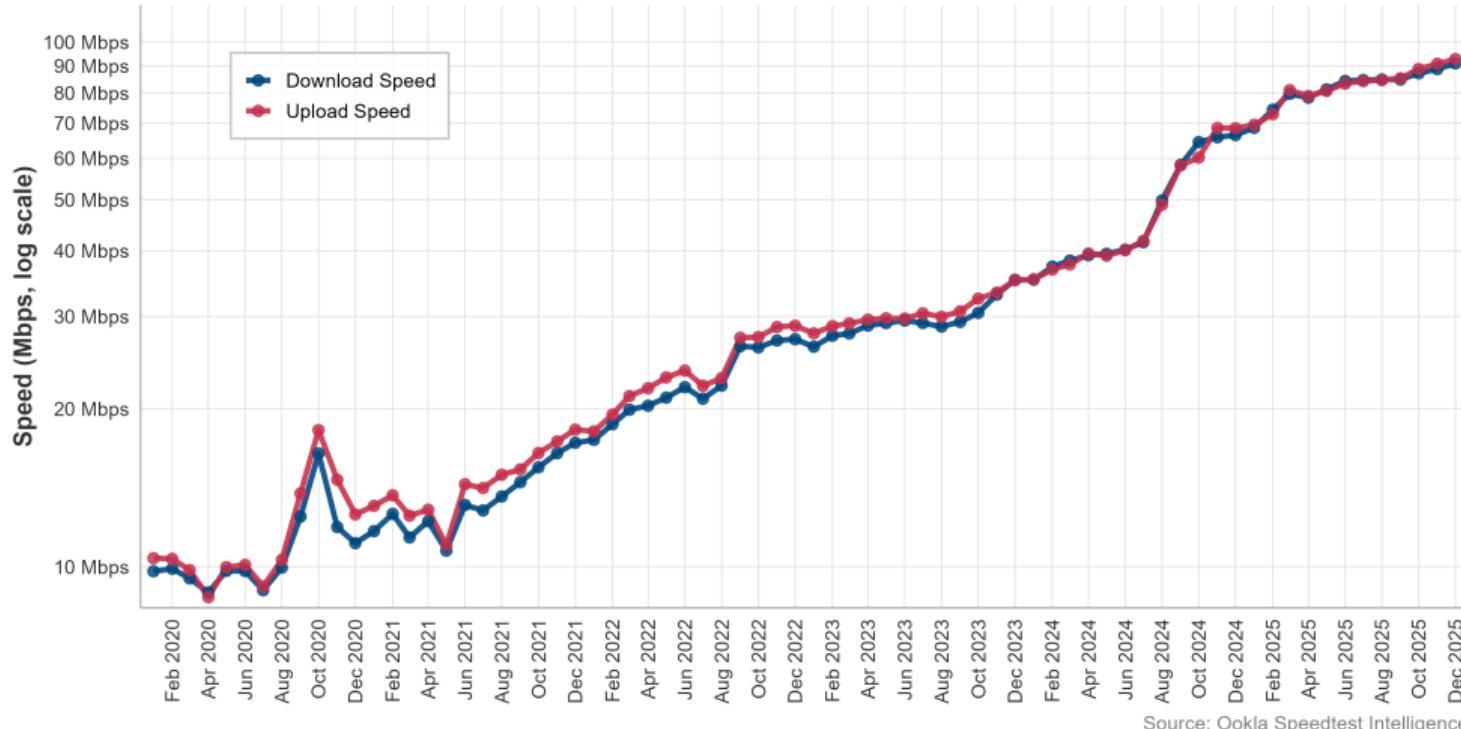


Source: Ookla Speedtest Intelligence

# Fixed Broadband: Download & Upload Speed Evolution

## Azerbaijan Fixed Broadband Speed Transformation

Median download and upload speeds showing dramatic improvement since fiber rollout (2020-2025) | Log scale

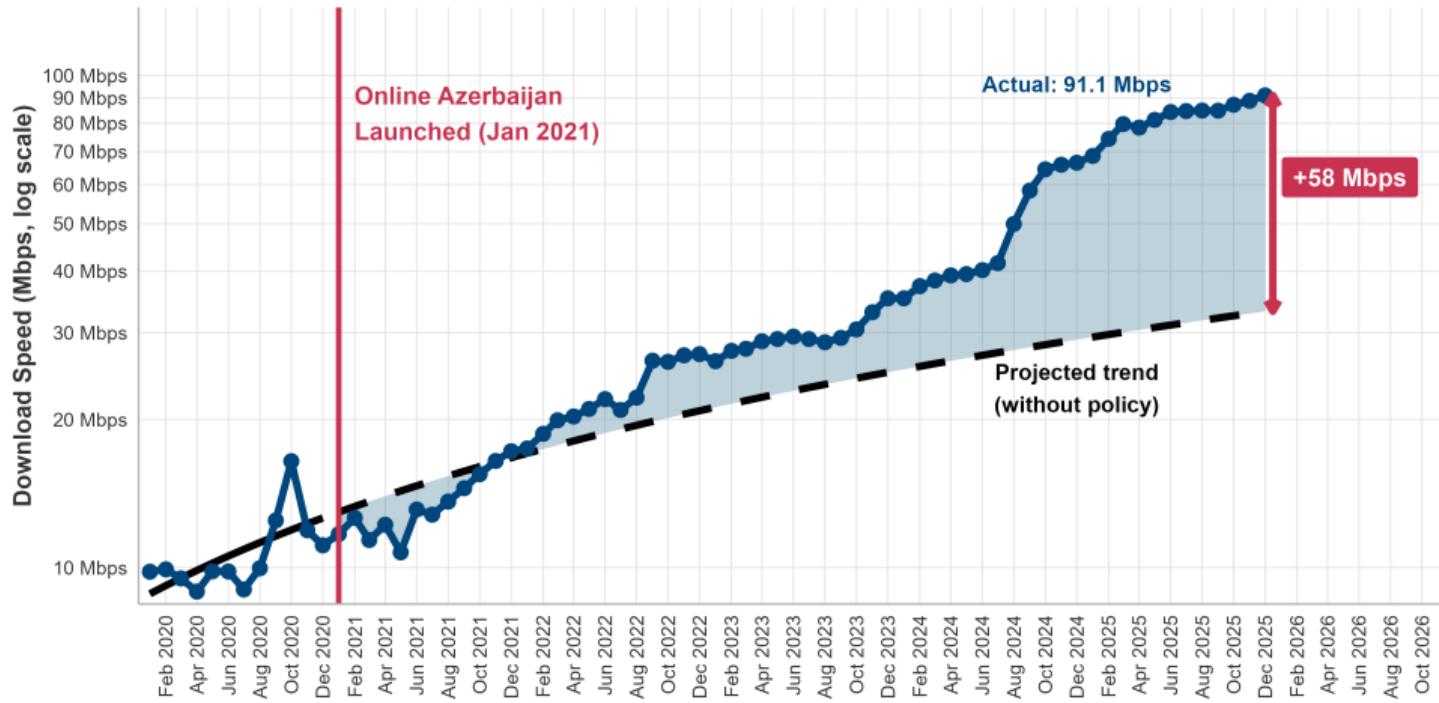


Source: Ookla Speedtest Intelligence

# What If Online Azerbaijan Never Happened?

## The Online Azerbaijan Effect on Fixed Broadband Speeds

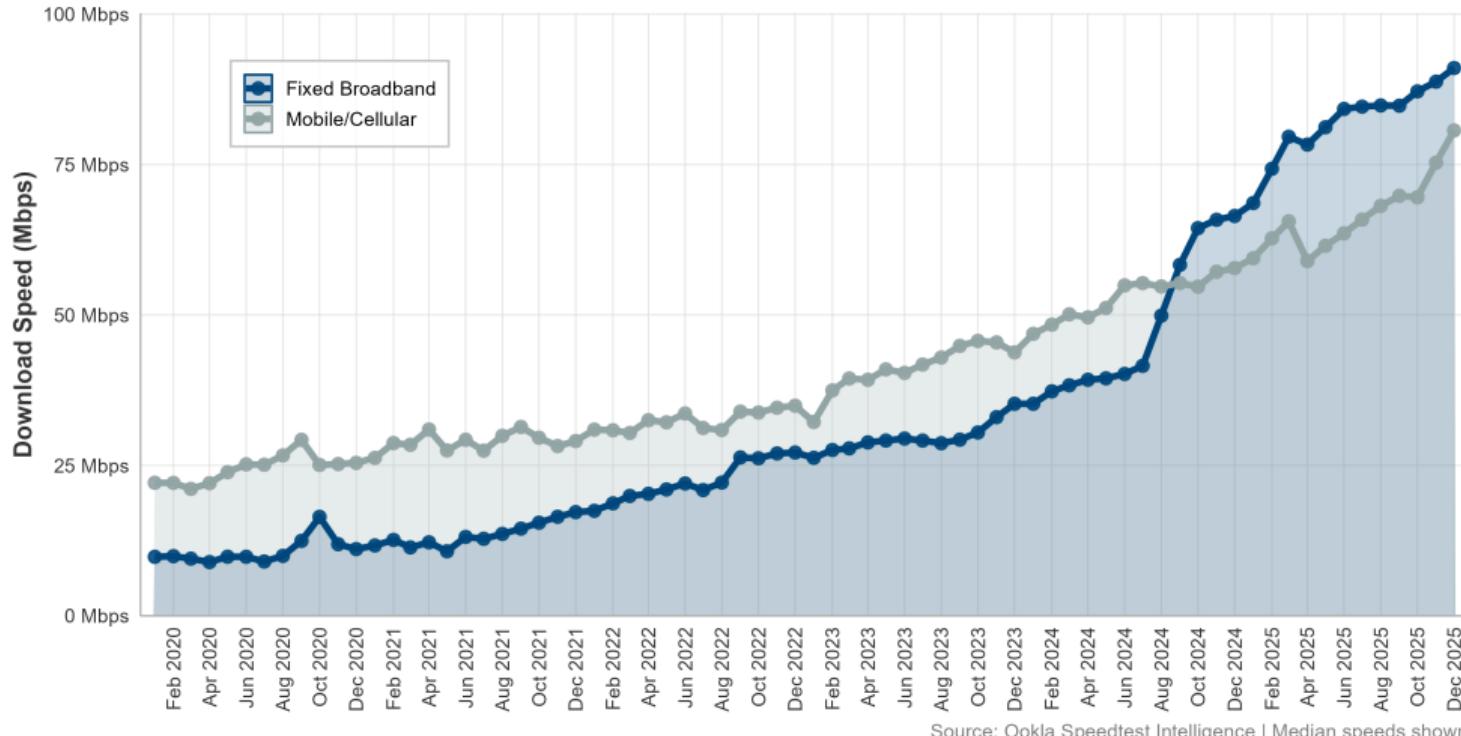
Trend fitted to pre-2021 data (solid black) projected forward (dashed) vs actual performance (blue) | Log scale



# Fixed vs Mobile: Fiber Investment Drives Fixed Broadband Growth

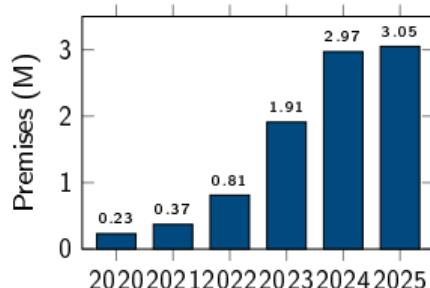
## Fixed vs Mobile Download Speeds in Azerbaijan

Fixed broadband shows accelerated growth driven by fiber-optic infrastructure investment



# Remarkable Progress: 5-Year Transformation

## Fiber Coverage Expansion



9% → ~100% (13x increase)

## Speed Transformation

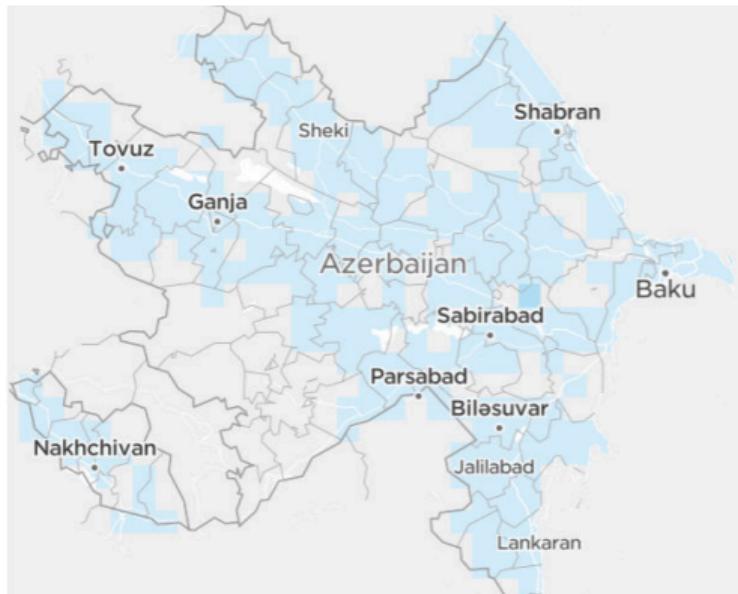
Metric	2020	2023	Q4'25
Download	10.5	29.8	<b>88.8</b>
Upload	11.1	30.8	<b>90.7</b>
Growth	1x	3x	<b>8x</b>

## Fiber Subscriber Growth

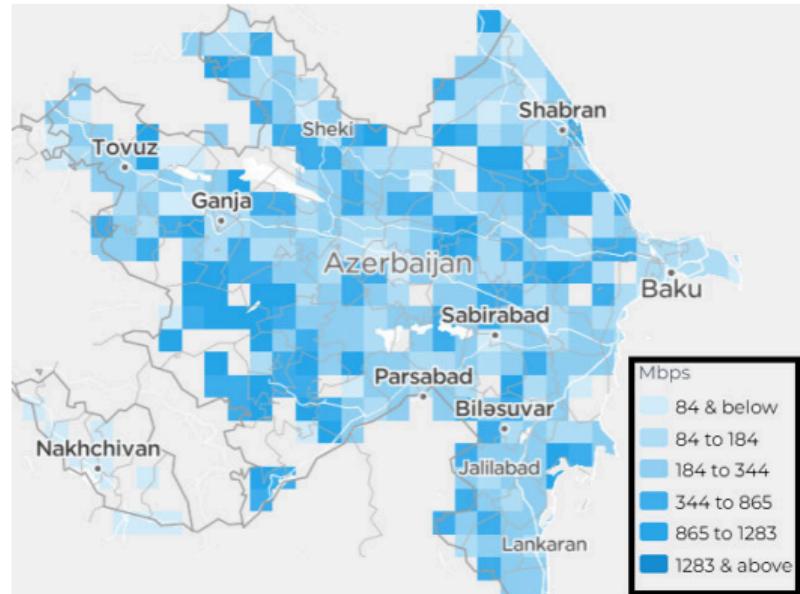
- 2023: 1.35M (71.1%)
- 2025 Q4: **2.30M (95.1%)**
- **+950K new** in 2.5 years

# Geographic Transformation: Coverage Expansion

January 2022



December 2025



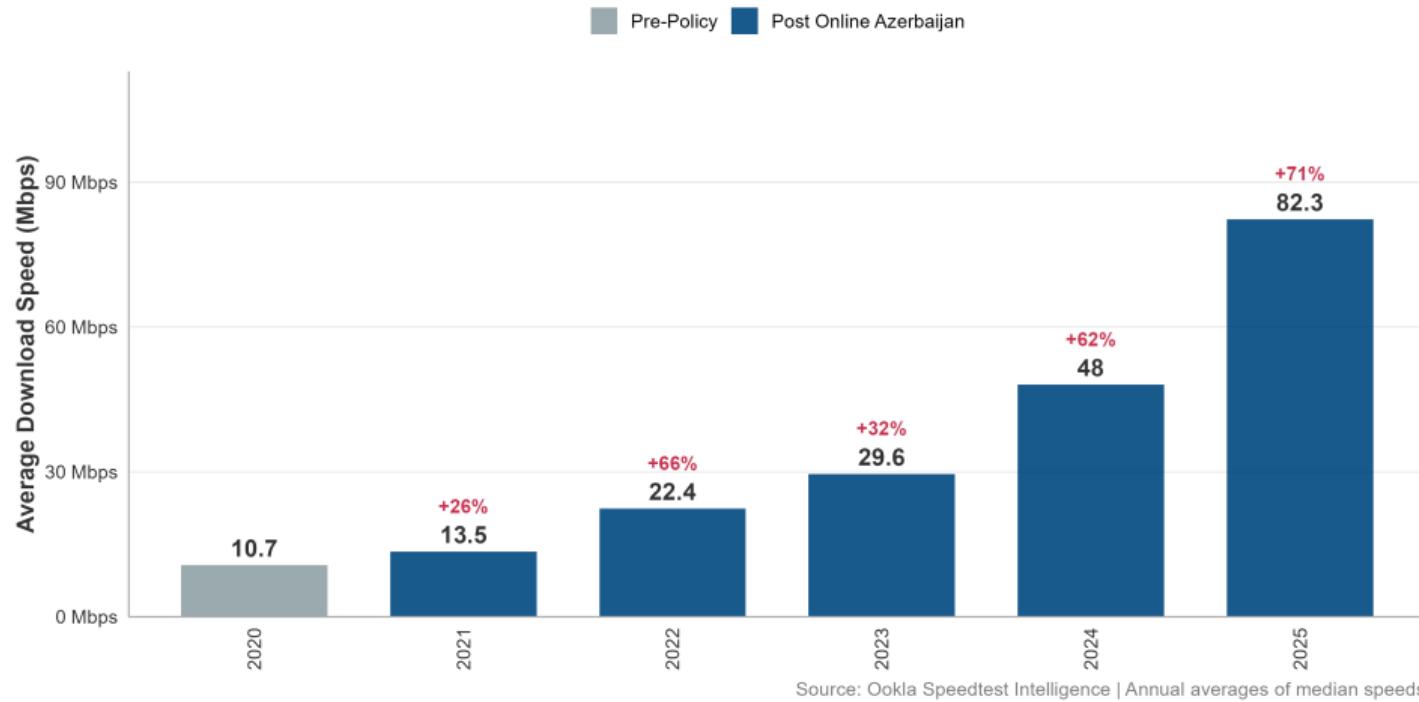
Source: Ookla Speedtest Intelligence®

*Nationwide connectivity transformation across all regions*

# Annual Speed Growth: Pre vs Post Online Azerbaijan

## Azerbaijan Fixed Broadband: Annual Average Speed Growth

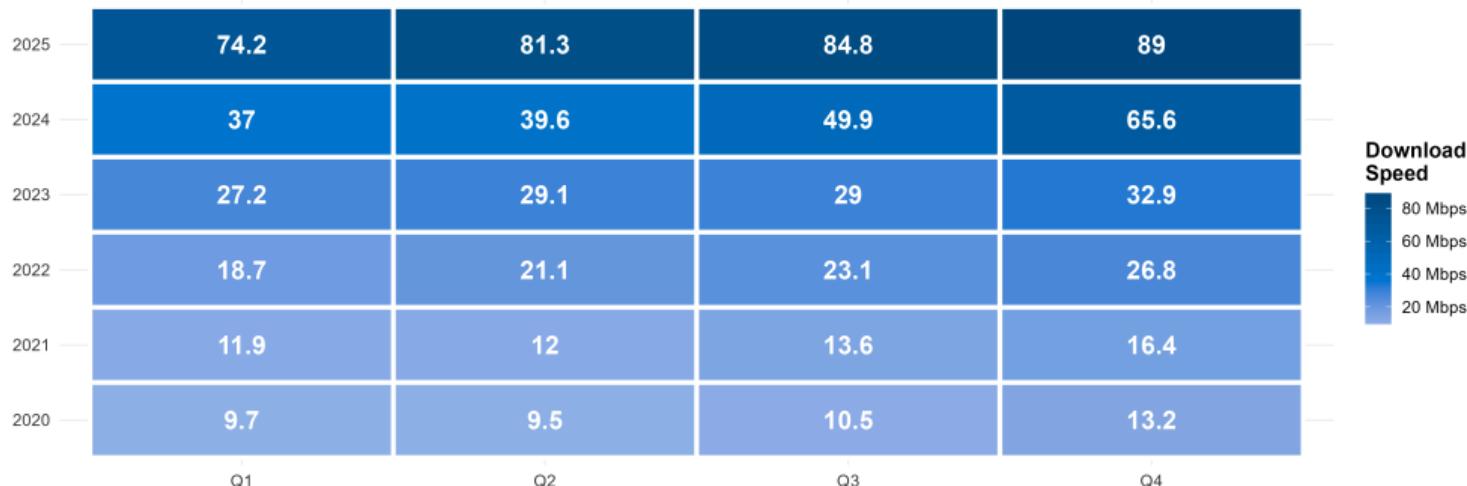
Year-over-year improvements driven by Online Azerbaijan fiber infrastructure program



# Quarterly Speed Heatmap: Acceleration from 2022

## Azerbaijan Fixed Broadband: Quarterly Performance Heatmap

Quarterly download speeds showing acceleration from 2022 onwards



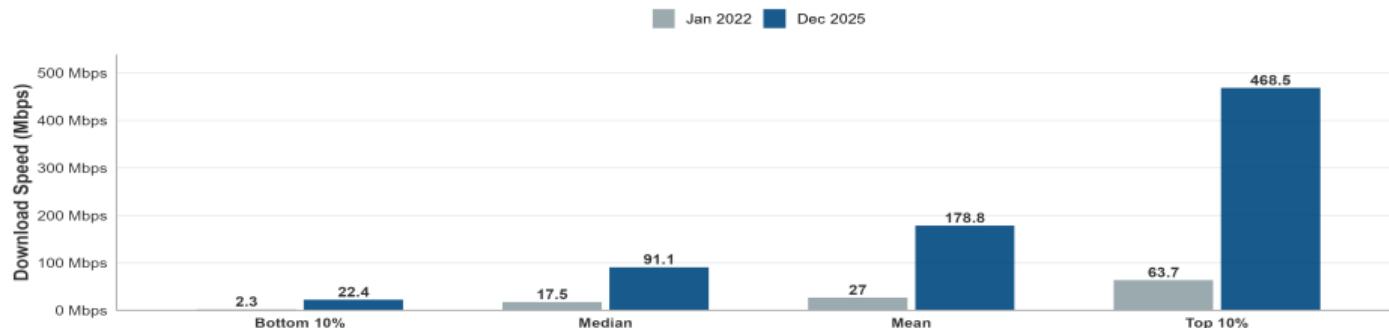
Source: Ookla Speedtest Intelligence median monthly speeds | Quarterly averages computed as arithmetic mean of monthly medians

Darker colors = faster speeds | Clear acceleration visible post-2021 | Source: Ookla Speedtest Intelligence®

# Speed Performance Evolution: 2022 → 2025

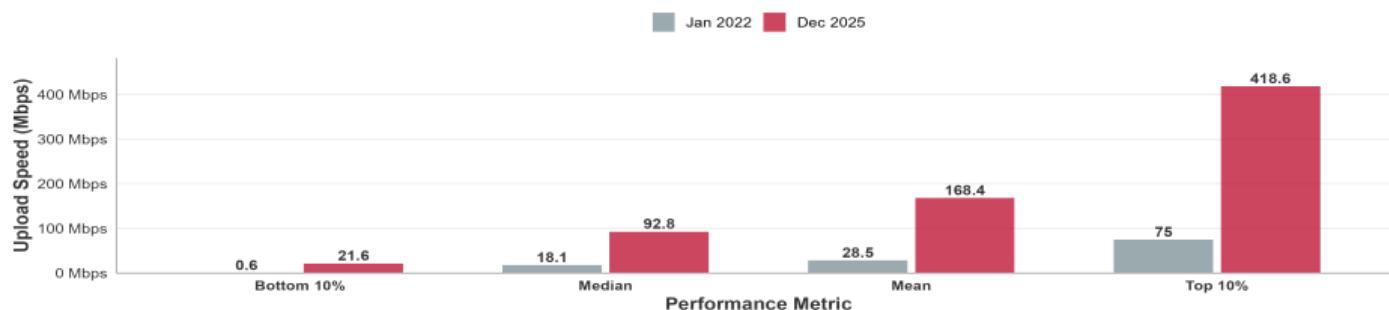
## Download Speed Evolution: 2022 → 2025

Median: 5.2x growth (17.5 → 91.1 Mbps) | Top 10%: 64 → 468 Mbps



## Upload Speed Evolution: 2022 → 2025

Median: 5.1x growth (18.1 → 92.8 Mbps) | Top 10%: 75 → 419 Mbps

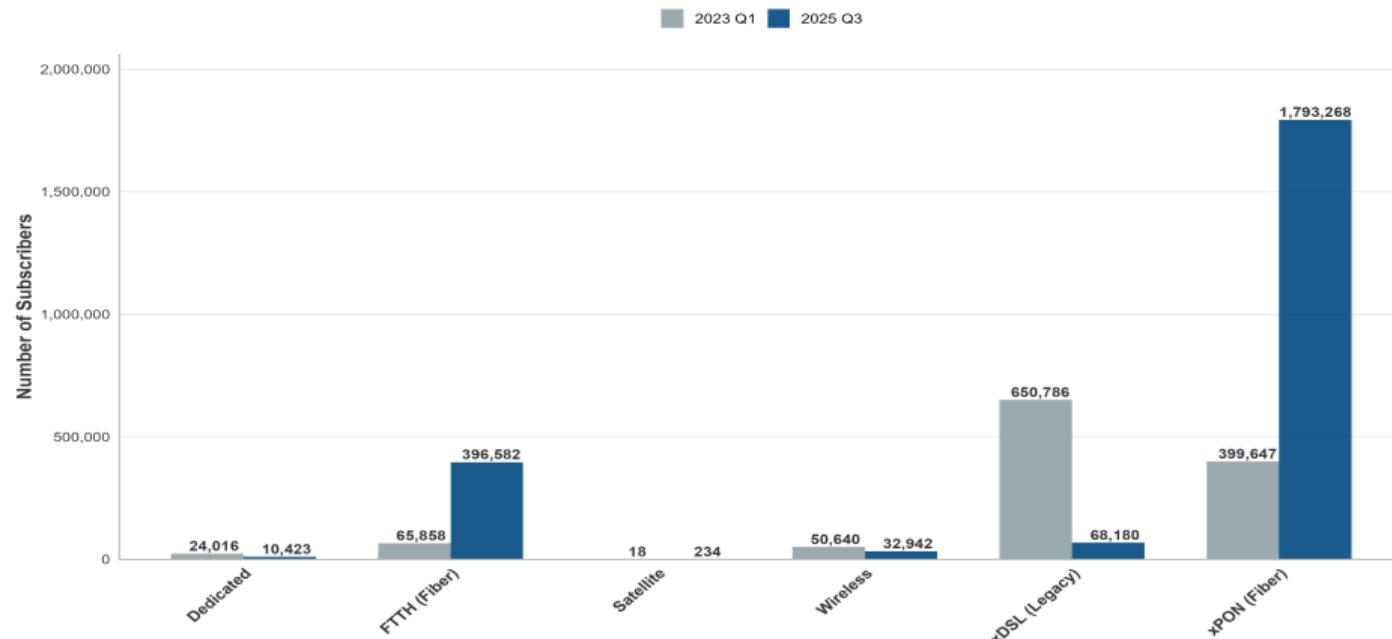


Source: Ookla Speedtest Data | All Providers Combined - Azerbaijan

# Infrastructure Evolution: Legacy → Fiber

## Technology Transformation: Legacy Copper → Fiber Infrastructure

2023 Q1: 1,190,965 subscribers (Fiber: 39.1%) → 2025 Q3: 2,301,629 subscribers (Fiber: 95.1%) | +93% subscriber growth



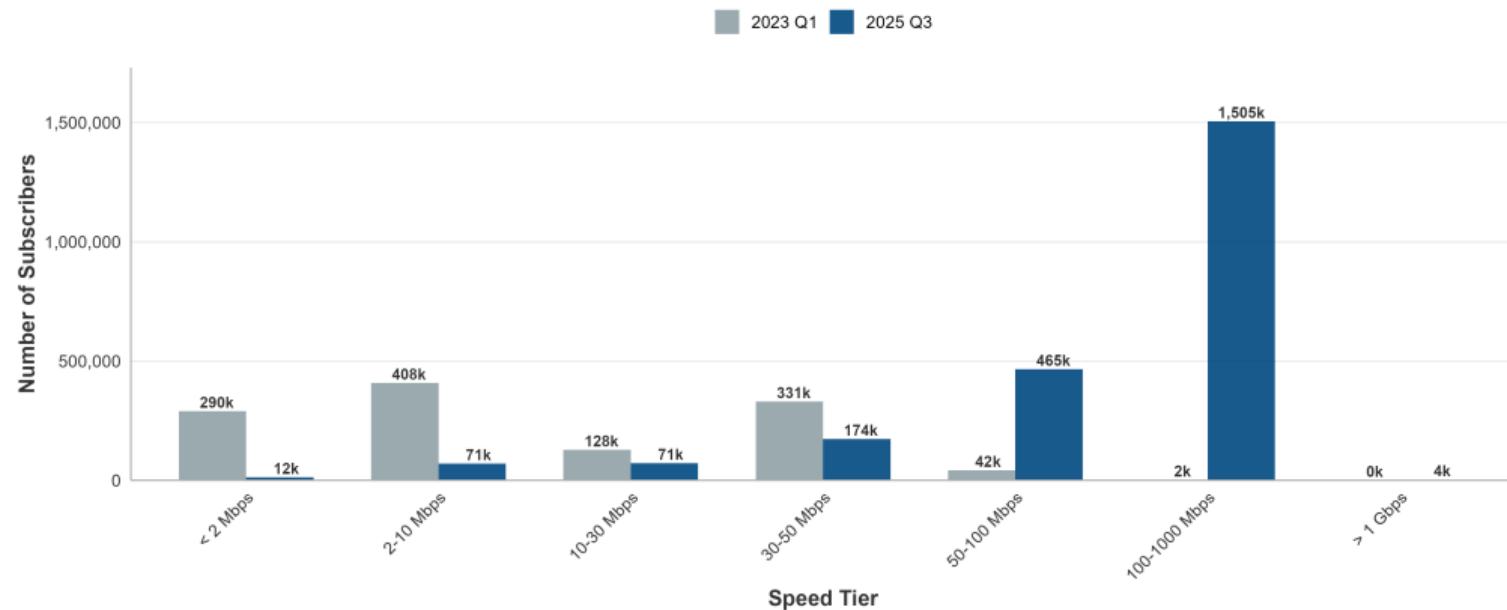
Source: ICTA Azerbaijan | xPON + FTTH = Fiber Technologies

xDSL (copper) collapsed from 55% to 3% | Fiber (xPON + FTTH) grew to 95% | Source: ICTA Azerbaijan

# Speed Quality Revolution: Basic → Premium

## Speed Quality Transformation: From Basic to Premium Speeds

Premium Tier ( $\geq 100$  Mbps): 2023 Q1: 0.2% → 2025 Q3: 65.5% | +65 percentage points



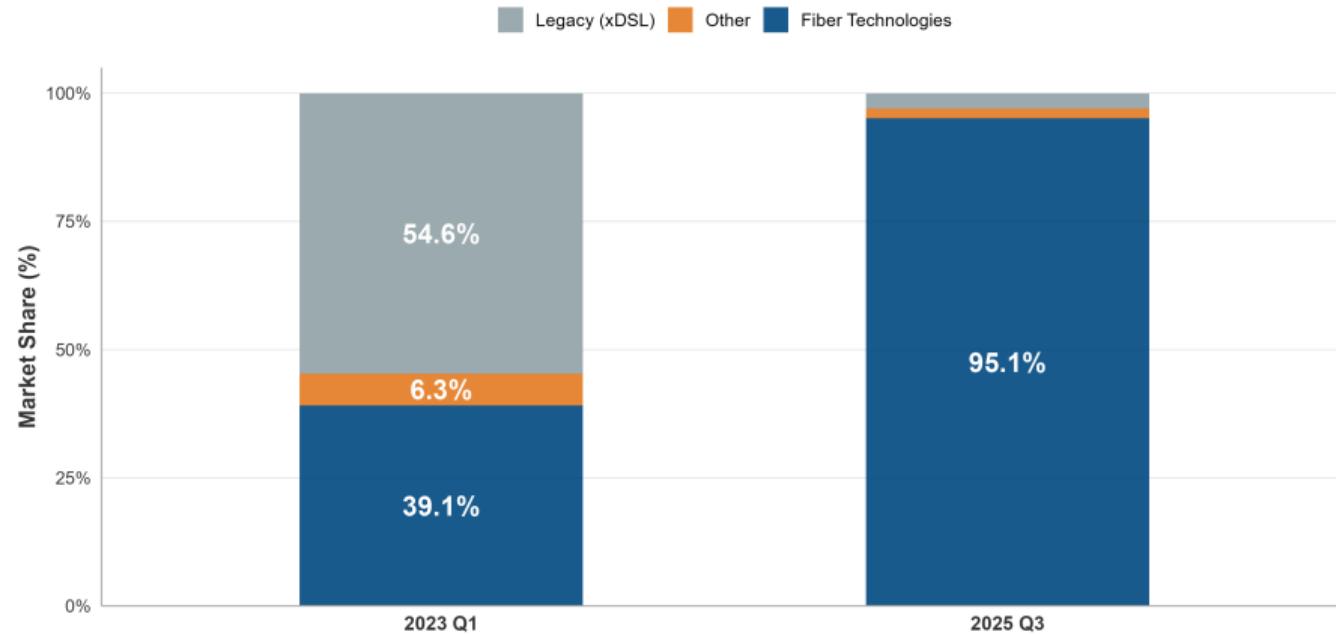
Source: ICTA Azerbaijan | Dramatic shift from low-speed to premium high-speed connections

Premium tier ( $\geq 100$  Mbps) grew from 0.2% to 65.6% | Most subscribers now on world-class speeds | Source: ICTA Azerbaijan

# Market Dominance: Fiber Takes Over

## Market Transformation: Legacy Copper → Fiber Dominance

Fiber technologies (xPON + FTTH) grew from 39% to 95% market share in 2.5 years



Source: ICTA Azerbaijan | Clear evidence of infrastructure modernization

Complete market transformation in 2.5 years | Infrastructure modernization success story | Source: ICTA Azerbaijan

# Connectivity as Competitive Advantage: Tourism

## Why It Matters

- Tourism requires consistent, reliable connectivity
- Hotel guests expect fast Wi-Fi
- Business travelers need 25+ Mbps

## Current Speeds

Location	Speed
Baku & major cities	73–85 Mbps
Tier-2 cities	58+ Mbps

Suitable for all hospitality applications

## QoS Development

- ICTA QoS standards (2024–25)
- Focus on consistency
- Performance verification

## Competitive Positioning

- Regional parity achieved
- International standards supported
- Regional areas upgraded

## Opportunity

*Connectivity is now a tourism asset*

# Azerbaijan's Digital Future

## Key Achievements

- ✓ **13x** fiber coverage (9% → 100%)
- ✓ **8x** speed improvement (10.5 → 88 Mbps)
- ✓ Rural-urban divide **bridged**
- ✓ **Tourism competitiveness enhanced**

## Strategic Vision 2025–2030

- Connectivity as tourism infrastructure
- Digital economy & hospitality hub
- Regional digital tourism leader

## Call to Action

- **Hotels:** Market world-class connectivity as differentiator
- **Tourism Operators:** Design digital-first experiences
- **Government:** Promote Azerbaijan as "connected destination"
- **Venues:** Deploy smart tourism solutions

### Closing Thought

*"Connectivity is a strategic national asset."*

Source: Ookla Research – Online Azerbaijan 2025

# Thank You

Dr. Samir Orujov

Head of Statistics Division

Information and Communication Technologies Agency

Azerbaijan Hospitality Connectivity Summit