# omnitele

## Albanian mobile network benchmark, June 2025

Report, 10 July 2025

# Omnitele measured the service experience in Albania with a drive-test benchmark campaign covering 10 cities

Drive test benchmarking measurements were carried out by Omnitele in Albania in June 2025. The measurements were conducted in 10 cities, Tirana, Durrës, Vlorë, Elbasan, Shkodër, Fier, Korçë, Pogradec, Gjirokastër, Lezhë and the main connecting roads between them. Measurements included voice, data and application testing for ONE and Vodafone.
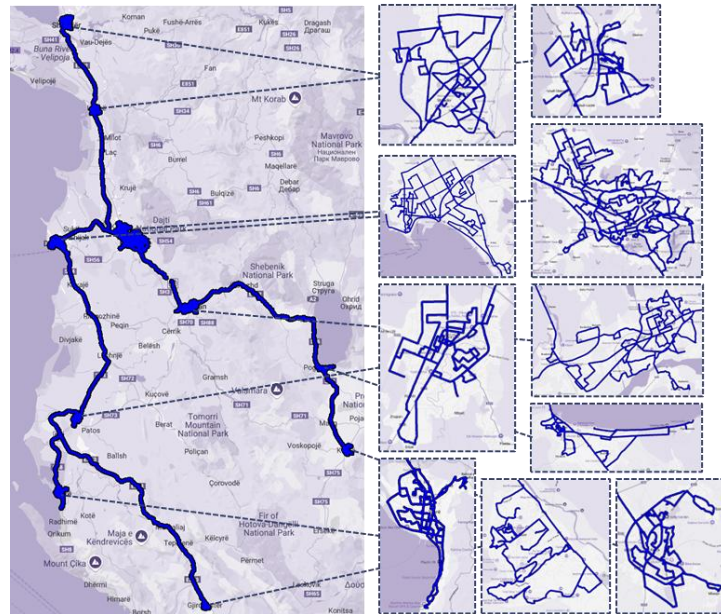
This year, both operators have started large-scale deployment of 5G. As 5G can have a notable positive impact on service experience, this report also explores the extent of 5G deployment in the benchmarked cities and its impact on network performance.



| **1 250+ km** | **40+ hours** |
| of roads covered | of measurements |

| **1 300+** | **4 750+** |
| voice calls per operator | data sessions per operator |

# Each operator was strong in all service experience areas, with winner typically decided by a small margin

Both operators had excellent voice service throughout the measured area, Vodafone overall performance being slightly better than ONE.

ONE network provided the highest average data speeds in download tests, while Vodafone average was somewhat higher in upload tests.

Both networks provided excellent application experience for the tested applications. YouTube performance was excellent for both operators. Facebook picture posting time was slightly shorter for ONE, while average web page loading time was a bit shorter for Vodafone.

| Service experience | | Winner |
|---|---|---|
| Voice | Call setup time | vodafone |
| | Call success rate | vodafone |
| | Voice call quality | one vodafone Tie |
| | Share of low quality | vodafone |
| Data | Download speed | one |
| | Share of low download speeds | one |
| | Upload speed | vodafone |
| | Share of low upload speeds | one |
| | Latency | vodafone |
| Applications | Web browsing: page loading time | vodafone |
| | YouTube: time to content | one vodafone Tie |
| | YouTube: share of low resolution | one vodafone Tie |
| | Facebook: picture post | one |

# Service experience benchmark results show that both operators provide excellent service throughout the benchmarked cities

## Voice call experience

Both operators had excellent voice service throughout the measured area, Vodafone overall performance being slightly better than ONE.

Vodafone average call setup time was shorter than ONE.

**Call setup time** - Average:

- ONE: 2.0 seconds
- **Vodafone: 1.6 seconds**

Both operators provided world-class consistent call success rate, Vodafone success rate being slightly higher.

**Call success rate**:

- ONE: 99.5 %
- **Vodafone: 99.8 %**

The measured voice quality was excellent for both operators.

**Voice quality** - Median (Mean Opinion Score):

- ONE: 4.7 / 5
- Vodafone: 4.7 / 5

## Data service experience

ONE network provided the highest average throughput in download tests, while Vodafone average was somewhat higher in upload tests.

**Download speed** average:

- **ONE: 258 Mbps**
- Vodafone: 197 Mbps

**Upload speed** average:

- ONE: 43 Mbps
- **Vodafone: 47 Mbps**

Vodafone network latency (median round trip time, RTT) was shorter in the measurements.

**Latency** - Median RTT:

- ONE: 71 ms
- **Vodafone: 49 ms**

Both networks also provided good data service quality very consistently.

**Good data service** - Share of download speeds over 10 Mbps and upload speeds over 5 Mbps:

- **ONE: 98 % and 92 %**, respectively
- Vodafone: 97 % and 90 %, respectively

## Application experience

Both networks provided excellent application experience for the tested applications.

Average web page loading time was bit shorter for Vodafone.

**Web browsing** - Average time to load web page:

- ONE: 2.5 seconds
- **Vodafone: 2.0 seconds**

YouTube performance was excellent for both operators.

**YouTube** - Share of Full HD & average time to start video streaming

- ONE: 99.9 % Full HD, 0.64 seconds to start streaming
- Vodafone: 99.9 % Full HD, 0.64 seconds to start streaming

Facebook posting time was slightly shorter for ONE on average.

**Facebook** - Average time to post picture

- **ONE: 8.5 seconds**
- Vodafone: 8.9 seconds

# Operators are deploying 5G across Albania

Both operators have started large-scale 5G deployment in Albania. 5G technology introduction enables better data speeds and more capacity, thus improving the network performance.

ONE Albania had deployed 5G in all the 10 benchmarked cities. Vodafone has had a different approach by the time of the benchmark, with 5G deployed in 5 of the 10 benchmarked cities, but somewhat more extensively in for example Tirana. As a result of more widespread deployment at the time of the benchmark, ONE 5G usage was higher than Vodafone in the measured cities.

**5G deployment in measured cities**

| one | vodafone |
|---|---|
| 10 / 10 | 5 / 10 |

**Share of 5G during measurements**

| one | vodafone |
|---|---|
| 78 % | 35 % |

# 5G impact most notable on download speeds

5G deployment has had a significant impact on the service experience. Typically, 5G deployment directly impacts the download speed benchmark, as 5G can provide a significant boost to the download performance, whereas the impact on upload speeds is somewhat more limited.
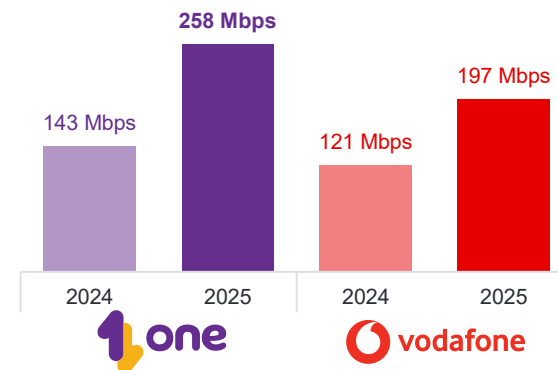
Between the Omnitele benchmark in 2024 and 2025, the average **download speed has improved by over 70 %**. Also, average upload speed has improved by over 30 %.

- ONE download speed has increased from 143 Mbps to 258 Mbps, while Vodafone download speed increased from 121 to 197 Mbps.

- ONE upload speed has increased from 38 Mbps to 43 Mbps, while Vodafone upload speed increased from 29 to 47 Mbps.

Application performance results have also improved, allowing the users to load web sites faster, have faster access to higher quality video streaming and post content, such as pictures, quicker to social media.

**Fastest Download Speed** in omnitele
benchmark 6/2025

one powered by 5G

Download speed improvement
in Omnitele benchmark

143 Mbps — 2024 (ONE)
258 Mbps — 2025 (ONE)
121 Mbps — 2024 (Vodafone)
197 Mbps — 2025 (Vodafone)

one    vodafone

# Benchmark methodology

## Be-the-customer approach

Omnitele conducted the campaign by following our internally standardised *be-the-customer* benchmark methodology. The approach is designed for capturing unbiased and objective view of the service experience. This means that:

- Measured services, test cases and methodology reflect real end-user traffic profiles.
- Testing times and locations reflect subscriber behaviour and traffic distribution.
- Each network is measured at the same time, in the same location with identical equipment.
- State-of-the-art smartphones (Samsung Galaxy S25 for data and applications and Samsung Galaxy S21+ for voice) are used in the measurements.
  - ➢ Measurement terminals freely select the best available network technology (5G/4G/3G/2G) as normal end-user devices do.
  - ➢ Measurement terminals are calibrated and swapped between operators to even out any bias from terminal impact.
- The best available subscriptions from each operator are used to mitigate any possible restrictions.
- Enough measurement samples are gathered for reliable statistical significance analysis.

## Service experience measurement test cases

| Test Case | Description |
|---|---|
| Voice Call | 90 s VoLTE/CSFB call sequence with MOS (Mean Opinion Score) voice audio quality measurement using POLQA algorithm |
| Data Session | HTTP download: 30 s continuous data transfer<br>HTTP upload: 30 s continuous data transfer<br>Latency: ping RTT (round trip time)<br>WWW browsing: static web page loading<br>YouTube: 30 s full HD video streaming<br>Facebook: Post picture (3 MB) |

## Service experience indicators

| Service | Key performance indicator (KPI) |
|---|---|
| Voice | Average call setup time, s |
| | Call success rate, % |
| | Voice audio quality, Mean Opinion Score (1-5) |
| | Share of low voice quality (MOS less than 3), % |
| Data | Average download data speed, Mbps |
| | Low download data speed, % below 10 Mbps |
| | Average upload data speed, Mbps |
| | Low upload data speed, % below 5 Mbps |
| | Median latency (round-trip time), ms |
| Applications | Browsing: time to load web page, s |
| | YouTube: time to content (buffering), s |
| | YouTube: share of low resolution (lower than Full HD), % |
| | Facebook: time to post picture, s |

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Omnitele is an internationally recognised, independent mobile network consulting company, with an extensive history in the domain of mobile network benchmarking through field measurements.

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