OSPEEDTEST Fastest Mobile Award



MegaFon is Russia's Speedtest® Awards Winner for mobile network speed. To win this award, MegaFon achieved a Speed Score[™] of 21.79, with average speeds of 24.68 Mbps for download and 10.57 Mbps for upload.

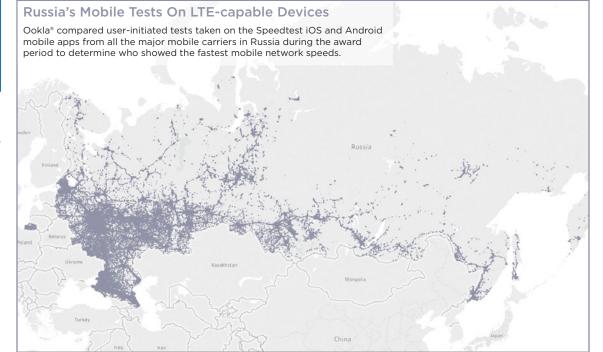
Speed Score 21.79

MEGAFON

| Carrier | Test Count | Speed Score |
|---------|---------------|----------------|
| MegaFon | 2,868,624 | 21.79 |
| MTS | 2,073,763 | 13.85 |
| Tele2 | 1,288,399 | 12.56 |
| Beeline | 1,571,554 | 10.51 |

Speed Score incorporates a measure of each provider's download and upload speed to rank network speed performance. See next page for more detail.

Russia Q1-Q2 2018



Market Statistics

| Test Count | Average Download Speed: | | Average Latency: |
|-----------------------------|-------------------------|---------------|------------------|
| 7,938,982 | 17.49 Mbps | 7.95 Mbps | 51 ms |
| Unique Devices 1,455,991 | Mbps | Mbps | (4) ms |
| iPhone 7 87,216 | MegaFon 24.68 | MegaFon 10.57 | MegaFon 50 |
| iPhone 5s 79,246 | MTS 15.49 | MTS 6.96 | MTS 49 |
| iPhone 6 70,532 | Tele2 13.83 | Tele2 6.50 | Tele2 57 |
| iPhone SE 63,533 | Beeline 11.63 | Beeline 6.27 | Beeline 49 |
| iPhone 6s 59,084 | | | |



How Speed Score Works

When analyzing fastest operators, Ookla solely considers top carriers (all carriers with 3% or more of total test samples in the market for the period). We then determine the fastest carrier using Speed Score which incorporates a measure of each provider's download and upload speed to rank network speed performance (90% of the final Speed Score is attributed to download speed and the remaining 10% to upload speed). The Speed Score uses a modified trimean to demonstrate the download and upload speeds that are available across a provider's network. We take speeds from the 10th percentile, 50th percentile (also known as the median), and 90th percentile, and combine them in a weighted average using a 1:2:1 ratio, respectively. We place the most emphasis on the download speeds and median speeds as those represent what most network providers' customers will experience on a day-to-day basis.



| Carrier Name | Download Trimean | 90 th Percentile | 50 th Percentile | 10 th Percentile | ① Upload Trimean | 90 th Percentile | 50 th Percentile | 10 th Percentile |
|--------------|------------------|--------------------------------|--------------------------------|--------------------------------|---------------------|--------------------------------|--------------------------------|--------------------------------|
| MegaFon | 23.07 | 55.33 | 16.82 | 3.34 | 10.23 | 24.77 | 7.45 | 1.26 |
| MTS | 14.65 | 33.15 | 11.46 | 3.09 | 6.64 | 15.42 | 5.13 | 1.07 |
| Tele2 | 13.25 | 27.40 | 11.25 | 2.54 | 6.35 | 15.02 | 4.66 | 0.90 |
| Beeline | 11.01 | 24.93 | 8.68 | 1.75 | 5.96 | 14.36 | 4.30 | 0.89 |

City Network Speeds

| City | Carrier | Speed Score | | ⑦ Mbps | |
|---------------|---------|-------------|-------|--------|------------------|
| Moscow | MegaFon | 37.36 | 41.93 | 14.46 | |
| | MTS | 19.25 | 21.50 | 7.30 | |
| | Tele2 | 13.54 | 14.84 | 6.83 | |
| | Beeline | 10.52 | 11.59 | 6.79 | |
| | | | | | |
| St Petersburg | MegaFon | 23.18 | 25.74 | 14.46 | |
| | Tele2 | 14.41 | 15.45 | 9.40 | |
| | MTS | 13.89 | 15.43 | 7.78 | |
| | Beeline | 13.29 | 14.55 | 7.27 | |
| | | | | (| 0 10 12 30 40 50 |

