

Mobile Network Experience Benchmarking Report

National and City
Quarter 03 2025

by OpenSignal

Disclaimer

Opensignal is a crowdsourcing platform that measures the Quality of Experience (QoE) delivered by mobile network operators to end users. The results published in this report are based on samples collected from real smartphone users throughout the day, covering indoor/outdoor locations, busy/off-peak hours, reflecting the actual end-to-end user experience while using everyday applications such as video streaming, voice calls, and web browsing, with traffic routed through actual servers rather than dedicated test servers.

Opensignal results may vary from PTA's Quality of Service (QoS) reports or other crowdsourcing platforms, as Opensignal measures end-to-end user experience (QoE) rather than network-level performance (QoS), and its methodology for sample collection differs from controlled drive testing or other measurement approaches.

Executive Summary

Pakistan Telecommunication Authority (PTA) publishes its third quarter Cellular Mobile Network experience benchmarking results based on independent tests and measurements conducted by Opensignal during 90-day period in the third quarter of 2025.

Scientific Approach

The benchmarking employs a rigorous post-processing system that takes the raw measurements and calculates robust and representative metrics. This includes a number of steps to quality-assure the measurements, including:

- **Initial filtering:** Certain entries are automatically filtered out, (e.g. when a phone is in a call) which are known to produce non-typical results.
- **Operator name mapping:** To reflect true user experience on an operator's network, results only include customers who directly subscribe to that operator's own service. MVNO subscribers (customers of companies that rent network space) and roaming users are not included, as they may receive different network priority.
- **Selection of network type:** Data is consolidated into technology types (3G, 4G, 5G), e.g. when considering 4G connections, low band and mid-band connections are included into a single technology type unless stated otherwise.
- **Scientific averaging:** Calculation of a single average per sampling device to ensure every device has an equal effect on the overall result. Essentially, "one device, one vote" policy is employed in the calculations.
- **Removing extreme values:** A percentage of extreme high and low values are eliminated. This removal of extremes is common data science practice and ensures the average calculated represents typical user experience.
- **Confidence interval:** Confidence interval represents the range in which the true value is very likely to be, taking into account the entire pool of data measurements.

Experience Metrics

This benchmarking analysis evaluates key network experiential metrics including:



Download Speed Experience: measured in megabits per second (Mbps), represents the typical everyday speeds a user experiences across an operator's mobile data networks.



Upload Speed Experience: measured in Mbps, measures the average upload speeds for each operator observed by our users across their mobile data networks.



Video Experience: quantifies the quality of video streamed to mobile devices by measuring real-world video streams over an operator's networks, built upon detailed studies and international standards which have derived a relationship between technical parameters, including picture quality, video loading time and stall rate, with the perceived video experience as reported by real people. Score range from 0 to 100.



Games Experience: measures how mobile users experience real-time multiplayer mobile gaming on an operator's network. Measured on a scale of 0-100, it analyses how our users' multiplayer mobile gaming experience is affected by mobile network conditions including latency, packet loss and jitter. This measurement methodology is also aligned with international standards for gaming measurements.



Time on Network: measures what proportion of time a user has a data (3G/4G/5G) network connection, in the places they most commonly frequent. Looking at the proportion of time users have a connection to a given technology, rather than focusing only on these connections are available. The Time-On Network metric is not a measure of a network's geographical extent. It won't tell you whether you are likely to get a signal if you plan to visit a remote rural or nearly uninhabited region.

Network Experience Benchmarking – National Results

Number of Samples 1,191,878,829	Data Period (90 Days) 1 July – 28 Sep 2025	Number of Districts (with more than 5000 samples) 161
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National Average Results

- **Download Speed Experience (All devices):** 16.60 Mbps
- **Download Speed Experience (High end devices):** 28.80 Mbps
- **Upload Speed Experience:** 5.33 Mbps
- **Video Experience:** 42.63 (out of 100)
- **Games Experience:** 40.82 (out of 100)
- **Time On Network:** 92.93% (out of 100%)

Operator National Results

Metrics				
Download Speed (Mbps)	17	6.03	11.37	17.16
Upload Speed (Mbps)	6.15	2.04	3.72	6.42
Video Experience (0-100)	45.67	32.61	40.54	43.12
Games Experience (0-100)	40.28	37.21	48.28	48.09
Time on Network (%)	91.67	90.04	92.52	95.99

Operator National Ranking

Metrics				
Download Speed (Mbps)	2 nd	4 th	3 rd	1 st
Upload Speed (Mbps)	2 nd	4 th	3 rd	1 st
Video Experience (0-100)	1 st	4 th	3 rd	2 nd
Games Experience (0-100)	3 rd	4 th	1 st	2 nd
Time on Network (%)	3 rd	4 th	2 nd	1 st

*For determining rankings, all values are calculated up to two decimal places.

Network Experience Benchmarking – City Results

Results from ten cities across Pakistan are published in this report, based on assessment is based on independent tests and measurements conducted by Opensignal during 90-day period in the 3rd quarter of 2025. This benchmarking analysis evaluates key network experiential metrics such as Download Speed, Upload Speed, Video Experience, Games Experience, Time-On Network.

Download Speed Experience (Mbps)

City				
Islamabad	18.62	4.8	11.59	15.32
Rawalpindi	18.67	4.69	11.13	15.16
Lahore	17.11	6.4	12.52	18.58
Karachi	16.98	9.55	12.02	17.85
Peshawar	16.95	4.23	10.32	14.59
Quetta	18.12	8.87	11.81	15.34
Faisalabad	18.77	7.57	11.72	17.02
Multan	18.24	9.22	12.2	19.52
Hyderabad	18.34	7.78	12.09	16.89
Gujranwala	17.6	4.89	12.2	16.33

Download Speed Ranking

City				
Islamabad	1	4	3	2
Rawalpindi	1	4	3	2
Lahore	2	4	3	1
Karachi	2	4	3	1
Peshawar	1	4	3	2
Quetta	1	4	3	2
Faisalabad	1	4	3	2
Multan	2	4	3	1
Hyderabad	1	4	3	1
Gujranwala	1	4	3	2

Upload Speed Experience (Mbps)

City				
Islamabad	6.69	2.56	4.11	6.09
Rawalpindi	6.48	2.19	3.89	6.21
Lahore	6.37	2.72	3.79	7.16
Karachi	6.99	2.16	4.07	7.40
Peshawar	6.75	2.16	3.60	3.91
Quetta	5.92	2.46	4.29	6.35
Faisalabad	6.07	1.98	3.79	5.43
Multan	6.22	2.14	3.86	8.00
Hyderabad	6.76	2.1	3.94	7.19
Gujranwala	6.95	2.48	3.89	5.42

Upload Speed Ranking

City				
Islamabad	1	4	3	2
Rawalpindi	1	4	3	2
Lahore	2	4	3	1
Karachi	2	4	3	1
Peshawar	1	4	3	2
Quetta	2	4	3	1
Faisalabad	1	4	3	2
Multan	2	4	3	1
Hyderabad	2	4	3	1
Gujranwala	1	4	3	2

Video Experience (0-100)

City				
Islamabad	52.15	32.86	44.51	43.33
Rawalpindi	50.19	32.29	43.41	41.72
Lahore	46.51	39.15	45.34	47.26
Karachi	47.23	38.37	42.72	42.57
Peshawar	47.20	29.99	37.74	38.79
Quetta	46.65	37.58	39.18	40.36
Faisalabad	45.55	35.68	41.78	42.8
Multan	45.99	41.06	44.17	44.86
Hyderabad	48.07	35.25	40.55	39.31
Gujranwala	45.27	31.15	43.86	42.58

Video Experience Ranking

City				
Islamabad	1	4	2	3
Rawalpindi	1	4	2	3
Lahore	2	4	3	1
Karachi	1	4	2	3
Peshawar	1	4	3	2
Quetta	1	4	3	2
Faisalabad	1	4	3	2
Multan	1	4	3	2
Hyderabad	1	4	2	3
Gujranwala	1	4	2	3

Games Experience (0-100)

City				
Islamabad	45.12	42.72	52.88	49.09
Rawalpindi	44.54	41.20	52.59	49.28
Lahore	40.57	40.90	46.95	50.36
Karachi	44.92	41.67	50.11	52.94
Peshawar	40.72	38.81	49.72	44.76
Quetta	39.33	37.47	47.36	46.73
Faisalabad	40.80	37.41	46.47	47.61
Multan	41.09	37.08	47.28	49.91
Hyderabad	43.59	37.17	48.15	49.66
Gujranwala	41.13	39.17	49.16	48.81

Games Experience Ranking

City				
Islamabad	3	4	1	2
Rawalpindi	3	4	1	2
Lahore	4	3	2	1
Karachi	3	4	2	1
Peshawar	3	4	1	2
Quetta	3	4	1	2
Faisalabad	3	4	2	1
Multan	3	4	2	1
Hyderabad	3	4	2	1
Gujranwala	3	4	1	2

Time on Network (%)

City				
Islamabad	92.83	92.02	92.61	96.82
Rawalpindi	91.95	90.86	93.09	96.63
Lahore	92.57	90.76	96.76	97.56
Karachi	91.90	89.12	96.81	97.00
Peshawar	88.37	90.37	87.39	93.51
Quetta	88.93	90.01	88.51	97.07
Faisalabad	91.61	88.17	86.47	95.29
Multan	95.66	96.64	95.24	97.25
Hyderabad	91.80	88.10	94.03	96.74
Gujranwala	92.55	90.98	96.72	96.33

Time on Network Ranking

City				
Islamabad	2	4	3	1
Rawalpindi	3	4	2	1
Lahore	3	4	2	1
Karachi	3	4	2	1
Peshawar	2	3	4	1
Quetta	3	2	4	1
Faisalabad	2	3	4	1
Multan	3	2	4	1
Hyderabad	3	4	2	1
Gujranwala	3	4	1	2

About Opensignal

Opensignal is the leading global provider of independent insights integrating network experience and market performance across converged, wireless and broadband operators. Opensignal measures the real-world experience of consumers as they use these networks, collects independent of any carrier-specific data feeds. For more details of metrics and methodologies, please visit <https://www.opensignal.com>