State of Mobile Networks: Chile (September 2016)

The land of poets is the latest stop in OpenSignal's tour of South America. Drawing on 84 million measurements conducted this summer, we put Chile's four nationwide mobile operators under the microscope and found a diverse group indeed. As upstart provider *red* against a regional heavyweight to bet network availability, while three different operators each took one of OpenSignal's speed awards.

Movistar and WOM lead our availability tests

Both our availability prizes were shared by Movistar and WOM. Our testers on those operators' networks were able to latch onto a 3G or better connection more than 93% of the time and on LTE signal more than 60% of the time.

Claro takes the 4G speed crown

America Móvil's Claro won our 4G speed award, averaging downloads of 27.3 Mbps. Entel and Movistar also surpassed the 20 Mbps mark in our tests, but we measured WOM's LTE speeds at 11 Mbps, half that of its competitors.

Movistar wins our overall speed award

While Movistar had neither the fastest 4G speeds nor the fastest 3G speeds in our tests, the Telefónica subsidiary still scored highest in OpenSignal's overall speed metric. How4 Our 4G availability ranking for Movistar was higher than both Claro's and Entel's, meaning that our users could latch onto better-performing LTE connections more often.

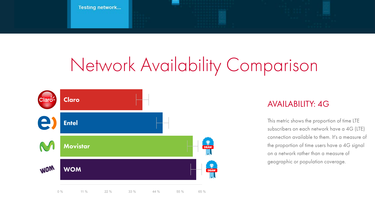
A mobile data signal is easy to find in Chile

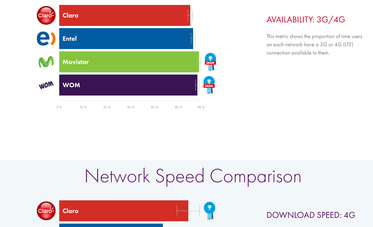
All four Chilean operators provided their customers with a 3G or better connection more than 87% of the time in our tests. Chile's national average of 91.2% leads South America and compares quite favorably to other countries.

REPORT FACTS

Report Location	Chile
Data Sample Size	84,147,090
User Sample Size	5,019
Sample Period	May 1st - Jul 31st 2016

Overall Network Comparison

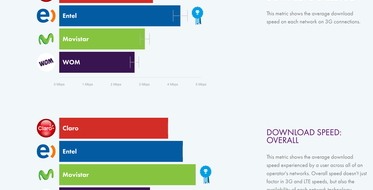




THE OPENSIGNAL APP: TESTING NETWORK PERFORMANCE ON MILLIONS OF PHONES GLOBALLY

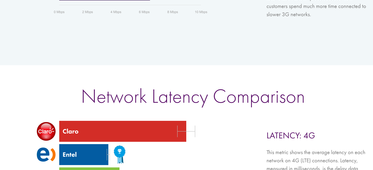
Our app-as-continually-runs tests to measure the real-world experience users receive. Instead of relying on user-initiated or drive-test simulations, we are able to paint a holistic picture of network's performance through our background tests and crowdsourcing techniques – all the while protecting the privacy of our millions of active OpenSignal users. The app has been downloaded over 13 million times collecting billions of measurements.

Network Availability Comparison



AVAILABILITY: 4G

This metric shows the proportion of time LTE subscribers on each network have a 4G (LTE) connection available to them. It's a measure of the proportion of time users have a 4G signal on a network rather than a measure of geographic or population coverage.



AVAILABILITY: 3G/4G

This metric shows the proportion of time users on each network have a 3G or 4G (LTE) connection available to them.

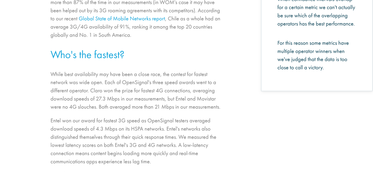
Network Speed Comparison

DOWNLOAD SPEED: 4G

This metric shows the average download speed on each network on 4G (LTE) connections.

DOWNLOAD SPEED: 3G

This metric shows the average download speed on each network on 3G connections.



DOWNLOAD SPEED: OVERALL

This metric shows the overall download speed experienced by a user across all of an operator's networks. Overall speed doesn't just factor in 3G and LTE speeds, but also the availability of each network technology. Operators with lower LTE coverage tend to have lower overall speeds because their customers spend much more time connected to slower 3G networks.

Network Latency Comparison

LATENCY: 4G

This metric shows the average latency on each network on 4G (LTE) connections. Latency, measured in milliseconds, is the delay data experiences as it travels between points in the network. A lower score in this metric is a sign of a more responsive network.

LATENCY: 3G

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Analysis

Chile's first 4G network went live in 2013, but in a period of 3 years Chilean operators have managed to attain some of the fastest 4G speeds in the region. While Chilean consumers still only have access to LTE signals about half the time, they have little trouble latching onto a 3G mobile data connection. Chile scored the highest in South America in 3G-or-better signal availability.

More than 5,000 OpenSignal users collected 84 million measurements up-and-down the spine of South America between May and July. Compiling that data in our first ever State of Mobile Networks for Chile, we compared the 3G and 4G performance of Chile's four major operators: Entel, Telefónica's Movistar, América Móvil's Claro and up-and-comer WOM. Instead of finding one or two operators dominating our rankings, we discovered that each operator had its own unique strengths. First, let's look at the tight race over signal availability.

Vying for a mobile data connection

When it comes to providing a mobile data connection, two operators stood out from the pack: Movistar and WOM shared OpenSignal's awards for both 4G availability and 3G-or-better availability. Rather than measure geographic coverage, OpenSignal's [availability metric](#) tracks the proportion of time users can access a particular network. In the case of Movistar and WOM, our testers were able to get a signal more than 60% of the time. When you add in those 3G into the mix, the two operators' availability scores increase to more than 92%. (Both operators were close enough in our tests to produce statistical draws in both metrics.)

While Movistar is an established player in Chile, WOM is a fairly new face. The former Nextel Chile was a tiny operator until it [found new owners](#) and new life last year. The newly renamed WOM began a [nationwide 4G rollout](#) in November and [quadrupled its subscriber base](#) in less than a year. Now it's vying for the title of most accessible 4G network in Chile, beating out more established players Entel and Claro, both of which delivered an LTE connection less than half the time, according to our tests.

In terms of overall mobile data signal availability, all of Chile's operators excelled. Though Movistar and WOM were tied for our 3G/4G availability award, each of the four operators was able to deliver at least a 3G connection more than 87% of the time in our measurements from WOM's lows may have been helped out by its 3G roaming agreements with its competitors). According to our recent [Global State of Mobile Networks report](#), Chile as a whole had an average 3G/4G availability of 91%, ranking it among the top 20 countries globally and No. 1 in South America.

Who's the fastest?

While best-availability may have been a close race, the contest for fastest network was wide open. Each of OpenSignal's three speed awards went to a different operator. Claro won the prize for fastest 4G connections, averaging download speeds of 27.3 Mbps in our measurements, but Entel and Movistar were no 4G slouches. Both averaged more than 21 Mbps in our measurements.

Entel won our award for fastest 3G speed as OpenSignal testers averaged download speeds of 4.2 Mbps on its HSPA networks. Entel's networks also distinguished themselves through their quick response times. We measured the lowest latency scores on both Entel's 3G and 4G networks. A low-latency connection means content begins loading more quickly and real-time communications apps experience less lag time.

The prize for best overall speed, however, went to Movistar in one of the rare instances in which neither the winner of our 4G speed award nor the winner of our 3G speed award had the best combined 3G/4G connections. Movistar won out through consistency. OpenSignal users may have clocked the fastest LTE connections on Claro, but they could only latch onto those signals 38% of the time. Meanwhile our testers saw slower speeds on Movistar's network, but they were able to access those speeds 64% of the time. It just goes to show that network availability is as important as raw speed when it comes to providing a fast overall mobile data experience.

The odd operator out in our speed rankings was WOM. While it had some of the *most consistently available* data networks in Chile, the connections those networks produced were routinely slower than those of its competitors, according to our data. We measured LTE speeds half as fast as the other three operators, and it came in last in all three of our speed metrics.

While WOM may very well continue to distinguish itself in LTE availability, it doesn't look like it will be catching up to its competitors in speed any time soon. In May, Chilean regulator [Subtel gave the green light](#) to Chile's three largest operators to launch LTE in the new 700 MHz frequency band. Movistar and Entel wasted no time bringing their second LTE networks online this summer, while Entel took the extra step of implementing [Chile's first LTE-Advanced system](#). With LTE-Advanced, Chilean operators could see a [sizable boost](#) in both LTE capacity and speed, allowing them to match the high-powered 4G connections we've seen emerge in Europe and Asia.

METHODOLOGY NOTES

OpenSignal data is collected from regular consumer smartphones and recorded under conditions of normal usage. As opposed to drive-test data, which simulates the typical user experience by using the same devices to measure network performance in a small number of locations, we take our measurements from millions of smartphones owned by normal people who have downloaded the OpenSignal app.

Those measurements are taken wherever users happen to be, whether indoors or out, in a city or in the countryside, representing performance the way users experience it. For more information on how we collect and analyze our data see our [methodology page](#).

For this particular report, 84, 147,090 datapoints were collected from 5,019 users during the period: May 1st - Jul 31st 2016

All data has been collected from users of the OpenSignal mobile app for [Android](#) or [iOS](#).

For every metric we've calculated the statistical confidence interval and plotted this on all of the graphs. When confidence intervals overlap for a certain metric we can't naturally be sure which of the overlapping operators has the best performance.

For this reason some metrics have multiple operator winners when we've judged that the data is too close to call a victory.