

State of Mobile Networks: Spain (July 2017)

Spain is one of Europe's largest mobile communications markets and this first OpenSignal State of Mobile Networks: Spain report looks at its four leading mobile operators: Movistar, Orange, Vodafone and Yoigo. Drawing on more than 226 million measurements taken from 20,436 smartphones using our OpenSignal app, our new country report shows these four operators delivering excellent 4G offerings.

Report Facts

226,257,163
Measurements

20,436
Test Devices

Mar 1 -
May 31,
2017
Sample Period

Spain
Report Location

Highlights

Movistar and Vodafone share 4G speed stakes

In our LTE speed measurements, Movistar and Vodafone tied for first place with the highest 4G download speeds at about 32 Mbps, but those speeds were only slightly ahead of third-placed Orange's respectable 28.8 Mbps.

Vodafone wins our 4G availability award

While Vodafone led the availability pack, providing 4G to its users 78% of the time in our tests, OpenSignal users on all of the other three major networks were still able to access 4G services more than 70% of the time.

Three operators deliver best 3G speeds

Our 3G speed metric produced a close race between Movistar, Vodafone and Yoigo who shared joint first place in our 3G-download category. Their users enjoying speeds between 5.8 Mbps and 6.4 Mbps in our measurements.

Spain: A Top-20 LTE country globally

In our latest State of LTE report, Spain's average 4G download connection speed of 29 Mbps places it firmly in the top 20 of the 75 countries we analyzed.

Awards Table

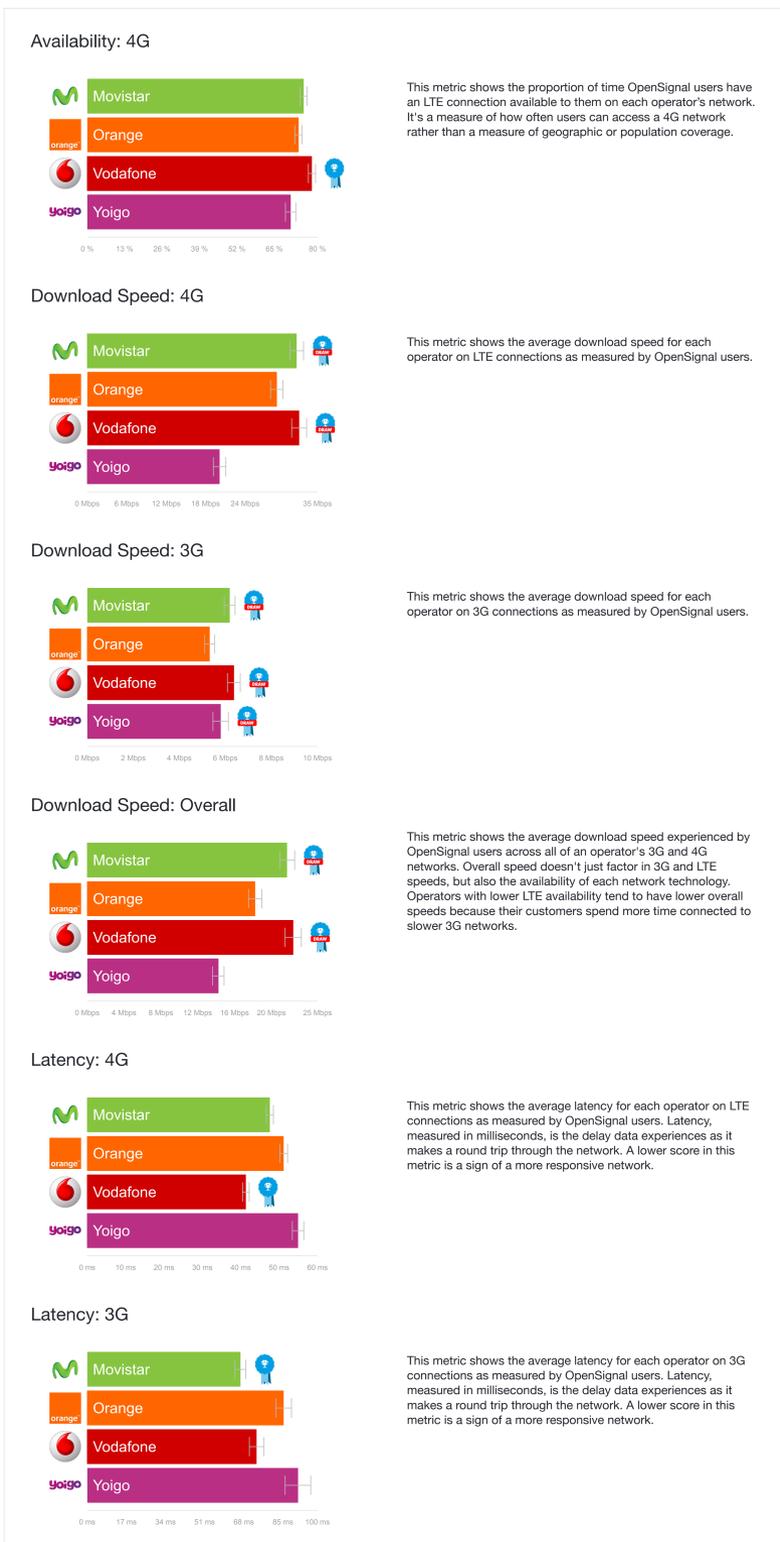
Operator	Download Speed: 4G	Download Speed: 3G	Download Speed: Overall	Latency: 4G	Latency: 3G	Availability: 4G
Movistar	🏆	🏆	🏆			
Orange						
Vodafone	🏆	🏆	🏆	🏆		🏆
Yoigo		🏆				

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Enjoyed our report? All our analysis is based on real measurements collected by millions of mobile network users. No simulations, no approximations: just real-world experience.

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Performance by Metric



Analysis

Spain is one of Europe's largest mobile communications markets, with four major mobile operators and a number of virtual network operators and resellers filling the landscape. This first OpenSignal State of Mobile Networks: Spain report looks at those four leading operators: Telefónica's Movistar, Orange, Vodafone and MásMóvil's Yoigo, all of whom appear to be doing a very good job for Spanish subscribers. Our results draw on more than 226 million measurements captured from 20,436 smartphones and smart devices between March 1st and May 31st this year.

A tight race for 4G dominance

The first metric we looked at was accessibility of 4G on these operators; what we found was a very good level of availability across the board from all networks. While our LTE availability results showed a clear winner in Vodafone, there wasn't much separating it from the other three operators. Our Vodafone testers had access to 4G signals more than 78% of the time, but the other three were in a very close race for second place with their subscribers still able to access 4G services more than 70% of the time.

In our 4G speed category, Movistar and Vodafone tied for first place with the highest average download speeds of 31.8 Mbps and 32.2 Mbps, respectively, making it statistically too close to separate the two of them. These winning speeds, however, were only just ahead of third-placed Orange, which averaged downloads of 28.8 Mbps in our tests. Meanwhile, last-placed Yoigo, originally the first operator in Spain to launch LTE, offered speeds just in excess of 20 Mbps, according to our data.

In our 3G speed tests, Yoigo joined Movistar and Vodafone in this category's tie for first place, with all three operators averaging HSPA download speeds greater than 5.7Mbps. Orange was in last place, but with average speeds in excess of 5 Mbps in our tests, its users still enjoyed healthy 3G speeds when its 4G service was unavailable.

Our last speed metric looks at overall download connection speeds, not only taking 3G and 4G speeds into account, but also network availability. And it's another tie for first place between 4G-speed winners Movistar and Vodafone, with the operators delivering 21.7 Mbps and 22.36 Mbps respectively in our measurements.

Network latency for both 3G and 4G is the final user-experience category we measured. This metric determines, in milliseconds, the delay that data experiences as it makes a round trip through the network. Our results for 4G services show Vodafone in first place with latency of 41.3ms, more than six milliseconds ahead of its nearest rival, Movistar. In our 3G responsiveness tests we saw the roles reversed, with first-place accolades going to Spain's biggest mobile operator, Movistar, with an average HSPA latency of 66.5ms. Vodafone was second with a latency of 73.6ms.

A global leader in 4G

LTE arrived in Spain in 2013 when all four players launched 4G, and since that time they've managed to keep pace with one another. As our results show: We recorded ties in our three speed categories and in the 4G availability all four operators were incredibly close.

Our latest [State of LTE report](#), based on 1st quarter 2017 data, shows Spain's 4G speed was in the top 20 of the 75 countries we analyzed with an overall average download connection of 29 Mbps. Movistar and Vodafone do a lot to pull up Spain's average with 30 Mbps-plus download speeds. The country also sits comfortably in our top 30 for 4G availability delivering an average 72.47% availability, though Spain is still some way behind the impressive global leader South Korea, which boasts 96.38% availability in our report.

Spanish subscribers can rest assured their operators are delivering good results based on our findings. And things look set to improve further. Telefónica, Nokia and Qualcomm are currently cooperating to [trial increasingly fast 4G speeds](#) using several technical advances. These include multiple-antenna technologies and new more advanced modulation schemes, both of which improve data rates while using spectrum more efficiently. Finally, last year's spectrum auction saw the Spanish regulator sell off a number of 2.6GHz and 3.5GHz spectrum chunks, which should lead to capacity improvements nationwide.

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Our Methodology

OpenSignal data is collected from consumer smartphones and recorded under conditions of normal usage. As opposed to drive-test data, which attempts to simulate what a user might 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 regular people who have downloaded OpenSignal's apps.

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

For this particular report, 226,257,163 datapoints were collected from 20,436 users during the period: Mar 1 - May 31, 2017.

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

For every metric we've calculated statistical confidence intervals and plotted them on all of the graphs. When confidence intervals overlap for a certain metric, our measured results are too close to declare a winner in a particular category. In those cases, we show a statistical draw. For this reason, some metrics have multiple operator winners.

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