



RootMetrics®
By IHS Markit

Substantiation of claim “The UK’s unbeatable network for reliability”

SUBSTANTIATION OF CLAIMS

Last Reviewed: 27/08/2021

Claims:

The UK’s unbeatable network for reliability

Summary

Vodafone’s claim to be the UK’s unbeatable network for reliability is based on RootMetrics’ extensive testing which assesses calls, texts, data, speed, accessibility, and reliability using the latest devices and a geographically representative methodology. The claim is based on network testing that takes account of all aspects of network performance related to reliability.

RootMetrics Awards

RootMetrics, an independent mobile analytics firm, publishes a series of reports, titled the UK RootScore® Report (the “RootScore Report”). The RootScore Report ranks the UK’s four major mobile network operators on several performance metrics, including “Network Reliability”, “Network Accessibility”, “Network Speed”, “Data Performance”, “Call Performance” and “Text Performance”. The report also ranks operators on “Overall Performance”.

The results of these awards show that Vodafone shared the awards and therefore was unbeatable in Network Reliability, Call Network Performance, and Text Network Performance in 1H 2021.

RootMetrics uses scientific methodologies to design tests, measure activities, and collect data about mobile network performance that are representative of a consumer’s mobile experience within a given market. RootMetrics then employs statistical techniques to verify and validate the results. This approach ensures all operators are measured on a level playing field, removes unintentional bias, and allow RootMetrics to provide actual, in-the-field data that confirms or challenges performance numbers that are otherwise only theoretical and based on ideal conditions. Weighting and stratification methods are used to ensure that test data correctly represents the overall national population distribution.

RootMetrics Testing Methodology

RootMetrics uses a well-controlled “drive” test to perform a geographically and temporally diverse “apples-to-apples” comparison of the four major wireless operators’ network performance. Testing is done simultaneously across all four operators to show a same-place, same-time view of performance differences between operators.

RootMetrics performs these tests using unmodified, off-the-shelf smartphones acquired from each operator. Testing in the first half of 2021 was done using the Samsung Galaxy Note 20 Ultra 5G for EE, O2, and Vodafone and the Samsung Galaxy S20 5G for Three. RootMetrics benchmarks new devices every year to ensure our testing captures each operator’s maximum possible performance with the most advanced devices. In some testing periods, the devices may vary between operators as device performance varies between operators. Once a device is selected after the benchmarking, all tests for a 6-month half year will be conducted with the same set of devices.

RootMetrics physically drives the phones around the country, to all four nations and extensively in the most populous 16 urban areas (which includes both the main city and surrounding towns within the Large Urban Zone), performing a variety of performance tests on each operators’ network. To ensure that its data remain current, RootMetrics performs tests in each nation at least every six months.

Substantiation of claim “The UK’s unbeatable network for reliability”

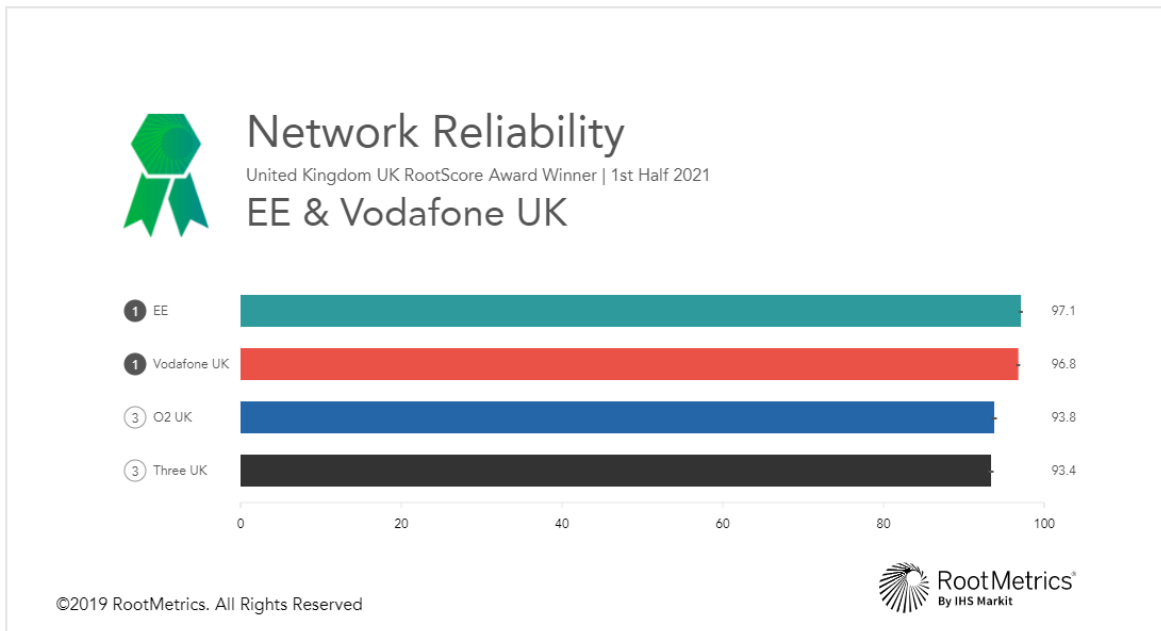
In the first half of 2021, RootMetrics personnel drove over 27,500 miles around the United Kingdom. RootMetrics obtained approximately 636,000 tests, assessing each network’s speed, reliability, and accessibility when calling, texting, or sending/receiving data.

RootMetrics tests data, call, and text performance by downloading and uploading files, downloading small files that represent web and app usage (secure and non-secure connections), making mobile-to-mobile phone calls, and sending and receiving text messages. Test data is categorised into “speed”, “reliability”, and “accessibility” measures (as, for instance, JD Powers might categorise and assess different aspects of auto performance or safety). Drive tests are conducted along motorways and major roads, major arterials, and residential streets where the population within a market generally lives and travels. Due to government restrictions and safety concerns caused by COVID-19, testing from the first half of 2021 does not include testing at indoor locations.

RootMetrics’ drive-based methodology successfully controls for numerous variables that fundamentally distort the data obtained through certain alternative, “crowd”-based methodologies. In so doing, RootMetrics ensures that the results obtained accurately reflect the difference between operators’ actual network performance and not—for example—differences in types of devices owned by different operator customers, differences in operator customer testing locations, or differences in a consumer’s willingness to run a speed test at a particular moment. RootMetrics testing also includes calling and texting, which is completely lacking in crowd-based data.

UK’s unbeatable network for reliability - 1H 2021

As shown in the chart below, Vodafone shared the award in the RootScore category of network reliability in 1H 2021. A shared award occurs when the performance of two or more network operators is statistically indistinguishable in our RootScore evaluation. When an operator shares a RootScore award, the operator has demonstrated that no other network provided superior performance during our testing. Therefore, we would allow all awarded operators to claim that they have provided unbeatable performance or that no one has beaten their performance during that testing period. In this case, we are allowing Vodafone to claim that they were unbeatable for network reliability in 1H 2021



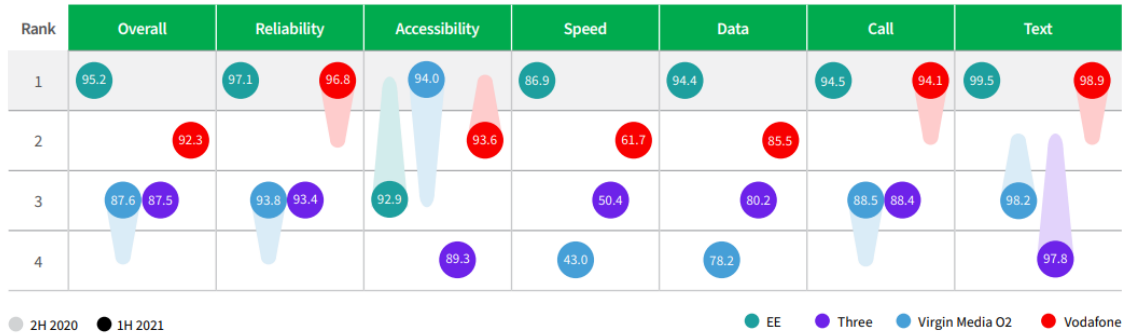
Source: <https://www.rootmetrics.com/en-GB/rootscore/map/uk/united-kingdom/2021/1H>

Appendix

RootMetrics 1H 2021 Test Results

Here, you can see the RootMetrics 1H 2021 results for each of the individual mobile network awards.

UK-wide RootScores 1H 2021



Source: <https://rootmetrics.com/en-GB/content/uk-mobile-performance-review-1H-2021>