

NET CHECK

Substantiation of London's Best Network claim carried out by NET CHECK

30th October 2024 – 7th November 2024

SUBSTANTIATION OF CLAIMS

Claim: London's Best Network

SUMMARY

The claim "London's Best Network" achieved by Vodafone is based on NET CHECK's mobile benchmark that was carried out between the 30th October 2024 and the 7th November 2024, across the Greater London Area.

The purpose of the benchmark was to assess the overall performance of the mobile networks in terms of accessibility, retainability, network quality and general performance. The key services that were assessed were voice calls, internet usage, WhatsApp calls, web browsing, live video streaming, network capacity for downloading and uploading files, online gaming and online meetings.

This report is an independent evaluation comparing the capabilities of the networks of the following operators: Vodafone, EE, Three, and O2.

NET CHECK BENCHMARK

NET CHECK was founded in 1999 with the aim of improving the quality of telecommunication networks. NET CHECK has become an acclaimed partner of network operators and infrastructure providers in relation to the optimisation of mobile and fixed communication networks for all technologies.

NET CHECK is part of the NC Group and is independent from any industry stakeholders. It has become a trusted partner of scientific and government institutions owing to its high level of expertise, data quality and security.

In order to ensure it continues to produce reliable results which can be demonstrated clearly, NET CHECK has implemented an ISO-certified management system and has aligned its testing and post-processing procedures in accordance with the standards of the telecommunication industry.

The criteria for creating the benchmark and assessing the relevant networks is created and determined exclusively by NET CHECK experts. This is a standardised process which the experts follow for all countries and test areas. The network operators being assessed have no influence on the routing of the tests within the test area or the timing of the tests within the test period.

METHODOLOGY

The NET CHECK testing methodology aims to provide a precise, unbiased and balanced assessment of network performance. It is based on ETSI (European Telecommunications Standards Institute) standards. The ranking is determined by an evaluation of the end-user experience and has been implemented in numerous countries by various network operators.

The testing is carried out through a series of extensive tests across the entire region to provide a representative and accurate view of the network's overall performance. These

tests were conducted across both weekdays and Saturdays to ensure the data samples captured a wide range of network conditions and user behaviours. The testing is carried out throughout the Greater London Area and covers all 33 local government districts and the driving routes (which were independently determined) went through all 32 London boroughs and the City of London.

The testing was done via drive tests using high-quality measurement equipment from Rohde & Schwarz with the SwissQual Benchmark II and the one of the latest Android smartphones, the Samsung S23+.

The measuring equipment was placed on roof boxes of two cars which collected the data on the voice and performance services. This allowed performance measurement for the data and voice services for all the operators at the same time across the same locations.

The voice services of each operator were tested through the sequencing of five mobile to mobile voice calls. This included 2 standard calls, 2 calls simulating internet usage during the call and 1 Whatsapp call. This sequence was then repeated. The data services were tested through browsing of frequently visited websites (such as Wikipedia, Google, Amazon etc.), livestreaming a video on YouTube, uploading and downloading files of specific sizes or during a specific timeframe and an interactivity test (consisting of online gaming and online meeting simulations).

This data was then collected and verified against certain Key Performance Indicators (KPIs). The KPIs act as the basis for the ranking and cover both the data services and voice services and aim to present the authentic customer experience. The maximum number of points an operator can earn is 1,000, with 350 points being the maximum for voice services and 650 points is the maximum amount for data services. The network operators ranking is then based on the measured KPI value. The NET CHECK ranking is an overall assessment of the end-user experience.

THE RESULTS

Facts from NET CHECK's tests conducted in the Greater London Area in October and November 2024:

- 32 London boroughs covered (as well as the City of London)
- 33 local government districts covered
- 23 driving routes driven
- 1,018 km covered through the driving tests
- 1,390 test calls performed
- Around 16,600 speech samples collected
- 15,700 data samples collected

Out of 1,000 possible ranking points, Vodafone achieved the highest ranking with 932.83 overall points, EE achieved 923.45 points, O2 achieved 834.16 points and Three achieved 757.82 points.

From assessing the voice and data services of UK mobile operators, NET CHECK has concluded that the performance remains consistently strong and competitive compared to other European network operators.

In the drive tests conducted across the Greater London area, Vodafone UK once again achieved the highest overall score, owing to its strong performance of its data services.

As a result, NETCHECK concludes that Vodafone is the best network in London.

Full verification can be found within the [NET CHECK “London’s Best Mobile Network” report 2024](#)

Results from the Mobile Network Benchmark of Greater London executed by NET CHECK between 30th October and 7th of November 2024

