

KPN Mobile is Netherlands' Speedtest Awards™ Winner for 5G speed during Q3—Q4 2022

154.59Speed ScoreTM

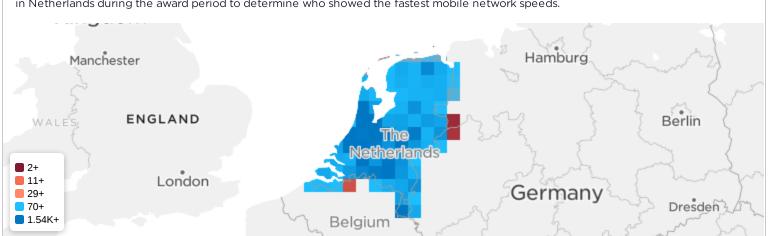
→ 36.54Median Speed Mbps

Speed Score™	
KPN Mobile	154.59
T-Mobile	136.10
Vodafone	84.92
Test Counts	
KPN Mobile	40,222
T-Mobile	48,644
Vodafone	37,987



Tests Taken

Ookla® compared 126,859 user-initiated 5G tests taken on the Speedtest iOS and Android mobile apps from all the major mobile carriers in Netherlands during the award period to determine who showed the fastest mobile network speeds.



Market Statistics

Unique Devices

50,902

iPhone 13 Pro	5,492
iPhone 13	5,070
iPhone 12 5G	4,896
iPhone 13 Pro Max	4,405
iPhone 12 Pro 5G	4,219

Median Download Speed

 $145.45_{\,\text{Mbps}}$

KPN Mobile	183.22
T-Mobile	159.07
Vodafone	98.20

♠ Median Upload Speed

28.65 Mbps

KPN Mobile	36.54
T-Mobile	35.24
Vodafone	15.92

Median Latency

 $21_{\rm ms}$

19
21
22

How Speed Score™ Works

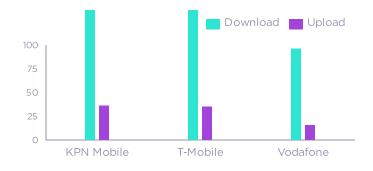
When analyzing fastest operators, Ookla solely considers top carriers (all carriers with 3% or more of total test samples in the entire market with 5G results for the full award period). We then determine the fastest 5G carrier using Speed Score for 5G results which incorporates a measure of each provider's download and upload speed to rank network speed performance (80% of the final Speed Score is attributed to download speed and the remaining 20% to upload speed). The Speed Score uses a modified trimean to demonstrate the download and upload speeds that are available across a provider's network. We take speeds from the 10th percentile, 50th percentile (also known as the median), and 90th percentile, and combine them in a weighted average using a 1:8:1 ratio, respectively. We place the most emphasis on the download speeds and median speeds as those represent what most network providers' customers will experience on a day-to-day basis. The winning provider must also have the fastest median 5G download speed during the award period.

	◆ Download Trimean	90th Percentile	50th Percentile	10th Percentile	① Upload Trimean	90th Percentile	50th Percentile	10th Percentile
KPN Mobile	183.68	307.84	183.22	63.23	38.22	85.08	36.54	4.78
T-Mobile	160.99	300.10	159.07	37.28	36.55	79.48	35.24	4.07
Vodafone	101.53	205.62	98.20	24.04	18.50	55.10	15.92	2.47

City Network Speeds

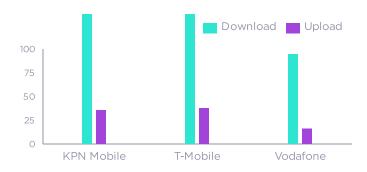
Amsterdam

Carrier	◆ Download Mbps	(1) Upload Mbps
KPN Mobile	167.63	35.83
T-Mobile	154.78	34.92
Vodafone	95.86	15.39



Rotterdam

Carrier	◆ Download Mbps	① Upload Mbps
KPN Mobile	165.12	35.78
T-Mobile	155.63	37.40
Vodafone	94.54	16.24



Utrecht

Carrier	◆ Download Mbps	① Upload Mbps
KPN Mobile	183.23	38.16
T-Mobile	153.81	39.00
Vodafone	95.89	15.59

