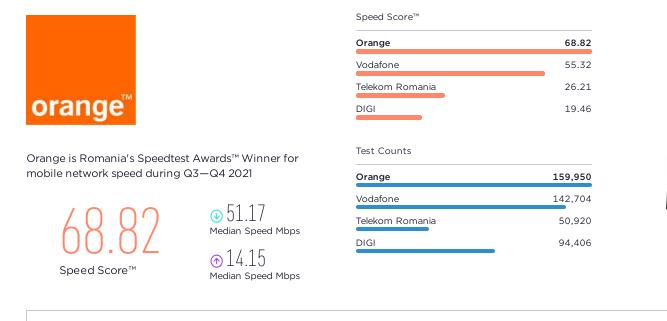
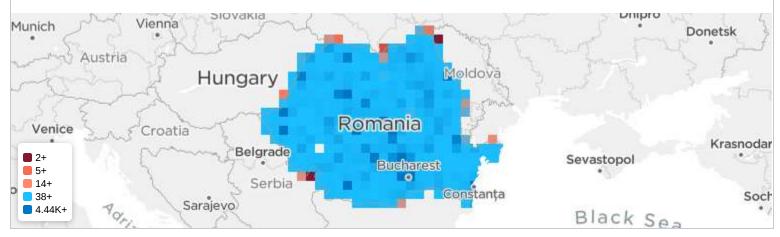
#### OSPEEDTEST AWARDS





#### Tests Taken

Ookla® compared 448,467 user-initiated tests taken on the Speedtest iOS and Android mobile apps from all the major mobile carriers in Romania during the award period to determine who showed the fastest mobile network speeds.



# **Market Statistics**

Unique Devices
107,285

iPhone 12 Pro Max 5G	4,327
iPhone 12 Pro 5G	3,298
iPhone 11	3,124
iPhone 12 5G	2,822
Galaxy S10+	2,078

Median Download Speed	k
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32.50 мыря

Orange	51.17
Vodafone	40.89
Telekom Romania	20.57
DIGI	16.84

📀 Median Upload Speed

10.26 Mbps

Orange	14.15
Vodafone	11.62
Telekom Romania	8.33
DIGI	5.15

🖲 Median Latency

```
24 ms
```

Drange	21
/odafone	23
elekom Romania	32
DIGI	31



# How Speed Score<sup>™</sup> Works

When analyzing fastest operators, Ookla solely considers top carriers (all carriers with 3% or more of total test samples in the entire market for the full award period). We then determine the fastest carrier using Speed Score for results which incorporates a measure of each provider's download and upload speed to rank network speed performance (90% of the final Speed Score is attributed to download speed and the remaining 10% 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.

	◆ Download Trimean	90th Percentile	50th Percentile	10th Percentile	🔿 Upload Trimean	90th Percentile	50th Percentile	10th Percentile
Orange	74.55	220.99	64.33	9.88	17.24	44.07	15.70	2.70
Vodafone	59.87	164.65	53.17	8.64	14.37	37.75	12.94	2.42
Telekom Romania	27.94	72.97	25.29	4.14	10.62	31.06	9.21	1.46
DIGI	20.94	49.84	19.51	3.42	6.17	16.27	5.57	0.89

# City Network Speeds

#### **Bucharest**

Carrier	🕁 Download Mbps	🔿 Upload Mbps
Orange	86.66	22.58
Vodafone	56.14	16.39
Telekom Romania	21.17	10.71
DIGI	17.47	6.07

