



Ookla's Coverage Metrics describe the user's mobile experience with their cellular network. Coverage Score™ incorporates a measure of each provider's service and footprint within the country. See next page for more detail.



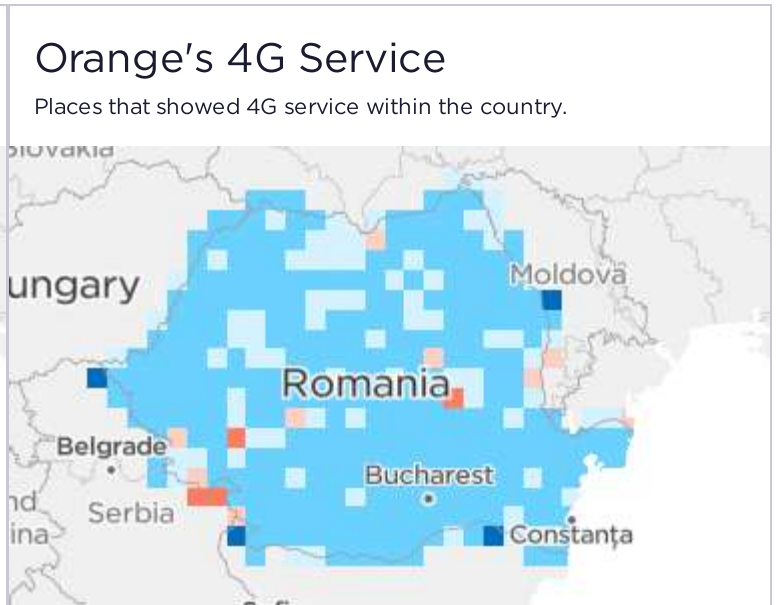
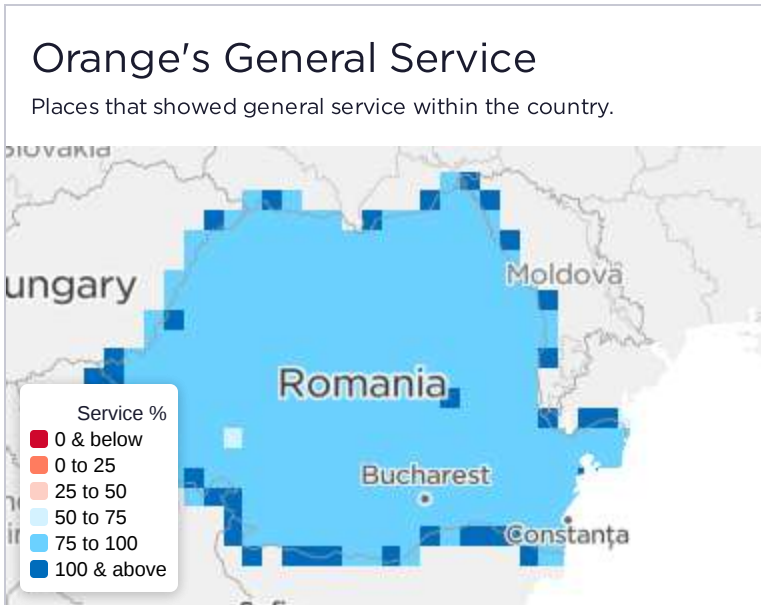
653
Coverage Score

Coverage Score

Orange	653
DIGI	601
Vodafone	556
Telekom Romania	469

Scan Counts

Orange	39,300,335
DIGI	32,324,208
Vodafone	32,921,405
Telekom Romania	15,248,856



Coverage Statistics

154,861,068
Scan Count

411,523
Total Locations Observed

409,934
Locations with Service

392,783
Locations with 4G

215,228
Device Count

Carrier	Total Locations Observed	General Service	4G Service
Orange	276,315	275,823	260,563
Vodafone	242,265	241,748	214,542
Telekom Romania	203,870	202,428	184,602
DIGI	254,006	253,197	241,303

How Coverage Score Works

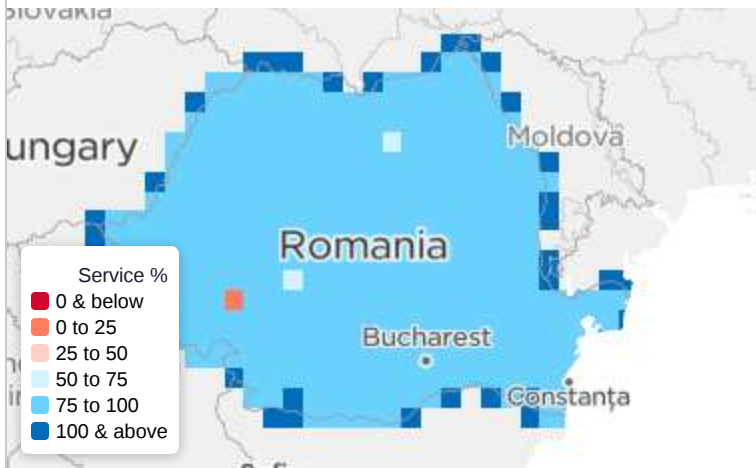
Ookla's Coverage Score captures both the number of locations in which an operator offers service (its footprint) and the quality of service in each location. Metrics are calculated using locations where coverage scans were contributed by Android Speedtest users. A location is an area that is equivalent to approximately 100 x 100m (about the size of a New York City block). To minimize the impact of misconfigured or underperforming devices, we require coverage scans from at least two devices at each location.

These features are determined using data from coverage scans, which capture the real-time network conditions of Android Speedtest users across the globe. An operator's footprint is the fraction of locations within a given market where a device has access to service. Each location is assigned a score based equally on the general and 4G service. For example, if a provider offered non-4G service in a location, that location would receive a score of 1/2. The overall Coverage Score for an operator is its footprint multiplied by the average quality score across its observed locations. Further, a multiplier is applied to the Coverage Score so that it is scaled from 0 to 1000 to avoid confusion that it could represent the percentage of an area or population with coverage.

Coverage Maps

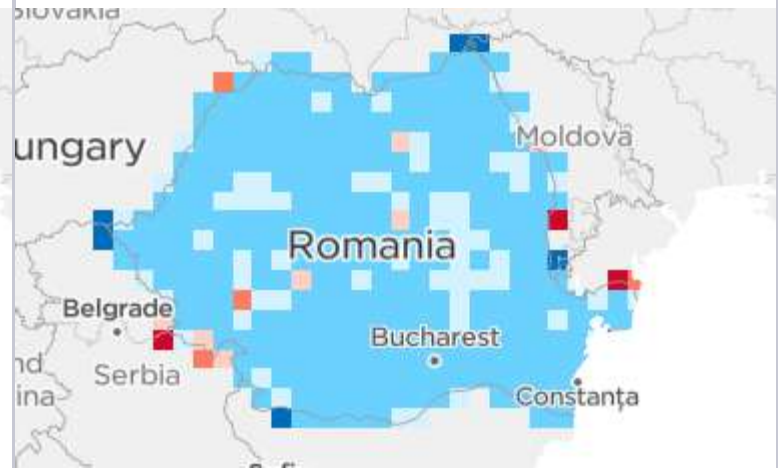
DIGI's General Service

Places that showed general service within the country.



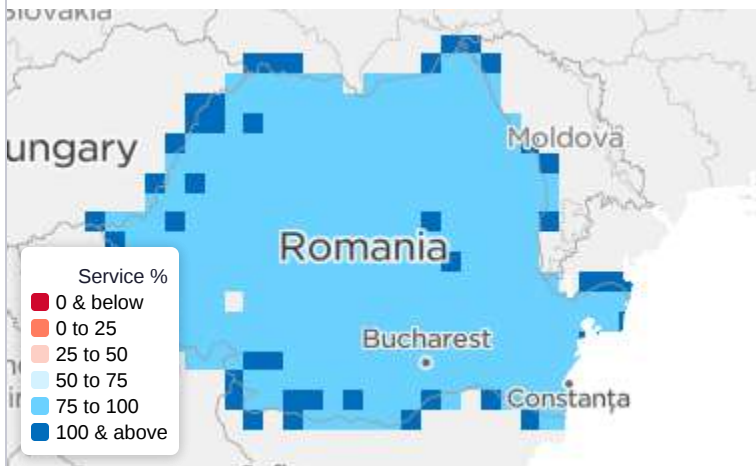
DIGI's 4G Service

Places that showed 4G service within the country.



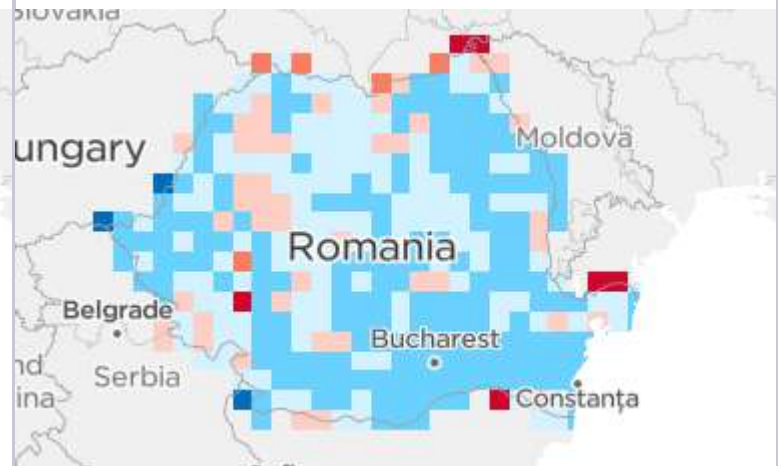
Vodafone's General Service

Places that showed general service within the country.



Vodafone's 4G Service

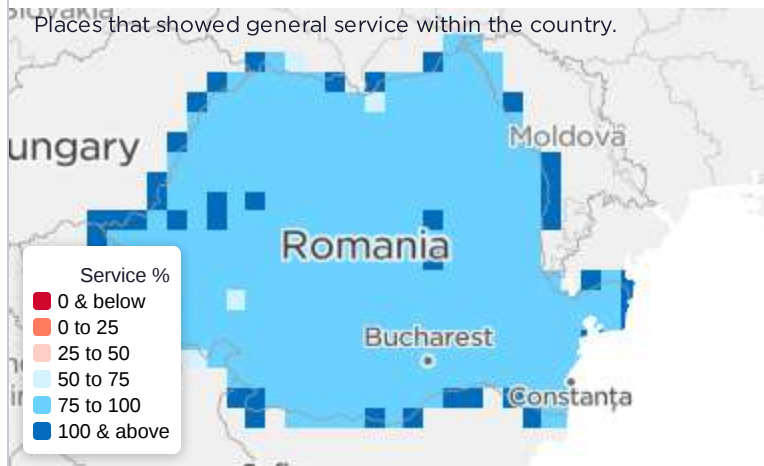
Places that showed 4G service within the country.



Coverage Maps

Telekom Romania's General Service

Places that showed general service within the country.



Telekom Romania's 4G Service

Places that showed 4G service within the country.

