



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.



769
Coverage Score

Coverage Score

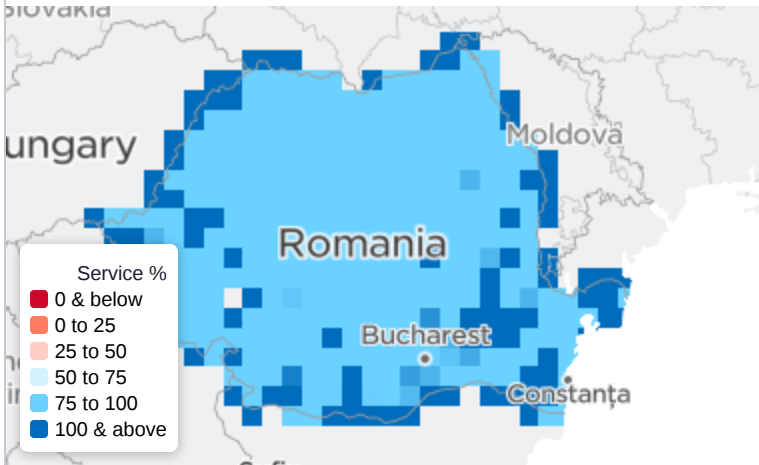
Orange	769
DIGI	578
Vodafone	540
Telekom Romania	356

Scan Counts

Orange	41,316,141
DIGI	32,785,738
Vodafone	31,886,119
Telekom Romania	12,397,120

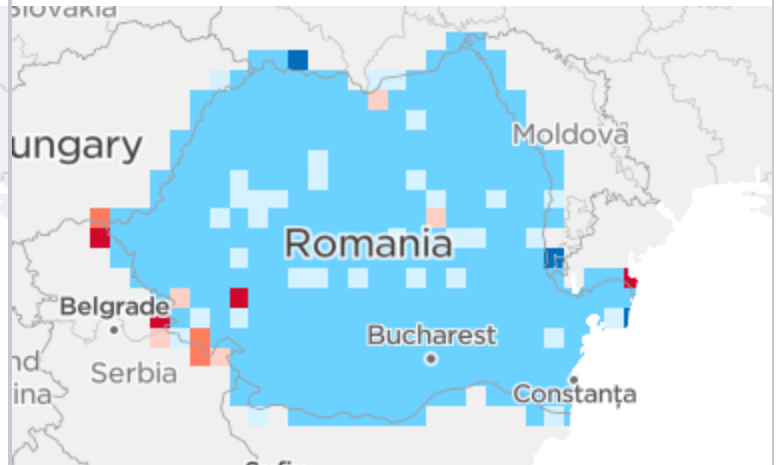
Orange's General Service

Places that showed general service within the country.



Orange's 4G Service

Places that showed 4G service within the country.



Coverage Statistics

166,652,646
Scan Count

404,441
Total Locations Observed

403,764
Locations with Service

394,514
Locations with 4G

267,691
Device Count

Carrier	Total Locations Observed	General Service	4G Service
Orange	316,648	316,110	305,798
Vodafone	224,424	224,254	212,657
Telekom Romania	146,070	145,851	142,095
DIGI	235,715	235,362	232,266

How Coverage Score Works

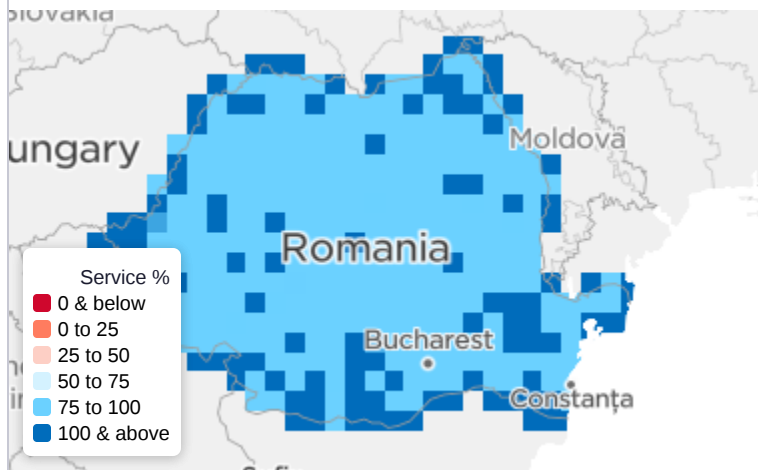
Ookla's Coverage Score captures both the number of locations in which an operator offers service (its footprint) and the quality of service in each location. Metrics are calculated using locations where coverage scans were contributed by Android Speedtest users. A location is an area that is equivalent 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

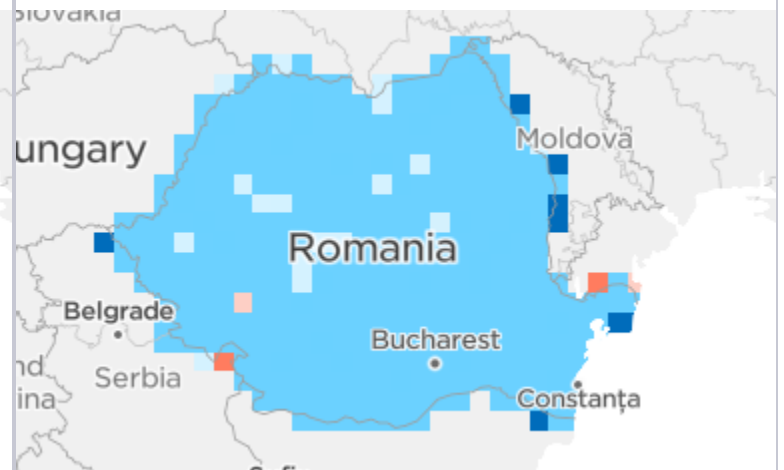
DIGI's General Service

Places that showed general service within the country.



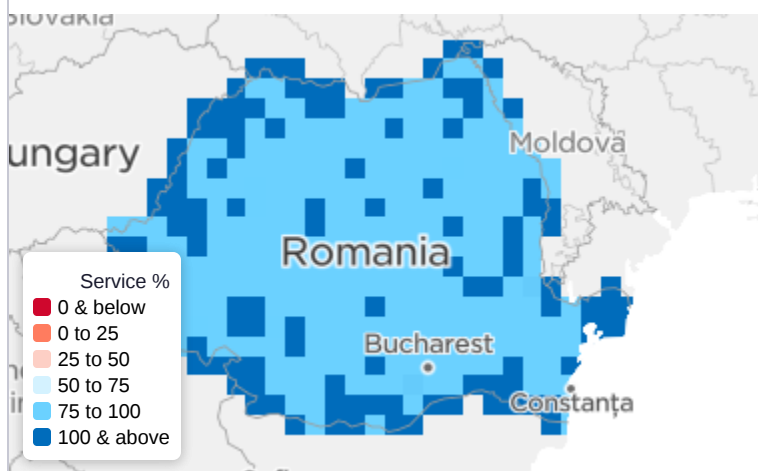
DIGI's 4G Service

Places that showed 4G service within the country.



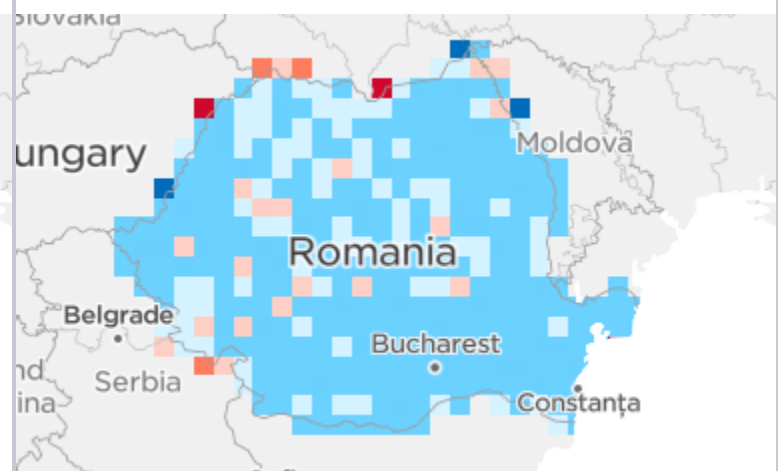
Vodafone's General Service

Places that showed general service within the country.



Vodafone's 4G Service

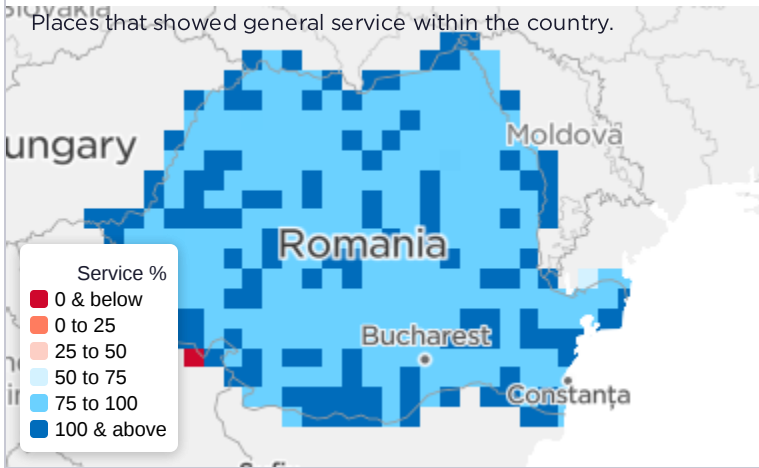
Places that showed 4G service within the country.



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.

