

About this data – mobile coverage

For our [Connected Nations 2025 publication](#), the four mobile network operators submitted data on their coverage, with a reference date of 1 July 2025.

As in previous years, we provide information on mobile coverage for UK and nations, local and unitary authorities, and Westminster parliamentary constituencies. For the first time we also provide data for devolved constituencies.

In addition, we now include information on 5G Standalone (5G SA), with the same metrics as reported for 5G, but we no longer report on Data (combined 3G and 4G).

Furthermore, we include a new file with selected statistics from our new consumer-facing web-based coverage checker tool, [Map Your Mobile](#).

More details on the data collection and analysis can be found in the [Methodology Annex](#).

If you have any questions or feedback on the data, please contact us at cnatateam@ofcom.org.uk.

We are providing this data on an open basis via the [Open Government Licence](#), which gives users various freedoms about how they choose to use the data, subject to conditions.

The files are provided as Comma Separated Values files, with double quote (") text delimiters where applicable.

Mobile coverage file for UK and nations

This file contains a subset of the data points provided on the page “Mobile Coverage: Operator comparison” of the accompanying interactive report.

File name	Number of data rows	File size
202507_mobile_coverage_UK_and_nations_r01.csv	1035	75 KB

Column headers and what they represent

Field	Values	Description/Notes
Location	UK, England, Northern Ireland, Scotland, Wales	
Technology	4G, 5G High Confidence, 5G Very High Confidence, 5G SA High Confidence, 5G SA Very High Confidence	The signal strength thresholds used when estimating coverage are provided in this table
Coverage type	Premises (Indoor), Premises (Outdoor), Geographic	Premises (Indoor) only for 4G
Rurality	Total, Urban, Rural	

Field	Values	Description/Notes
MNO	At least one, All, None, EE, O2, Three, Vodafone	The operator(s) providing coverage (see Note)
Coverage percentage		Percentage of premises or pixels covered
Coverage volume		Number of premises or pixels covered
Date	Jul-25	Date of latest snapshot (Mon-YY)

Note: There are no 5G SA data points for All and Three, reflecting that the latter does not yet deploy 5G SA services.

Mobile coverage for other levels

We provide information at three levels:

1. Local and unitary authority (laua)
2. Westminster parliamentary constituency (pcon)
3. Devolved constituency (devcon)

Level	File name	Number of data rows	File size
Local and unitary authority	202507_mobile_coverage_laua_r01.csv	361	232 KB
Westminster parliamentary constituency	202507_mobile_coverage_pcon_r01.csv	650	395 KB
Devolved constituency	202507_mobile_coverage_devcon_r01.csv	131	86 KB

Column headers and what they represent

Field	In files	Description
laua	laua	Local or unitary authority code, such as S12000033
laua_name	laua	Local or unitary authority name
parl_const	pcon	Westminster parliamentary constituency code, such as E14001318
parl_const_name	pcon	Westminster parliamentary constituency name
devolved_const	devcon	Devolved constituency code, such as W09000022
devolved_const_name	devcon	Devolved constituency name

Field	In files	Description
prem_count	all	Number of premises in location
pixel_count	all	Number of 100m x 100m pixels in location
ab_rd_count	all	Number of 100m x 100m pixels in location containing A or B road features
mway_count	all	Number of 100m x 100m pixels in location containing motorway features
mway_ard_count	all	Number of 100m x 100m pixels in location containing motorway or A road features
[Service]_[Coverage type]_[Number of operators] (see below)	all	Percentage of premises or pixels in location for [Coverage type] with coverage for [Service] from [Number of operators]. For example: 4G_prem_in_2: the percentage of premises with indoor 4G coverage from exactly 2 operators

Each file has 154 columns with coverage for the following combinations of service, coverage type and number of operators:

Variable	Values	Description/Notes
Service	2G, 3G, 4G, Voice, 5G_high_confidence, 5G_very_high_confidence, 5G_SA_high_confidence, 5G_SA_very_high_confidence	The signal strength thresholds used when estimating coverage are provided in this table
Coverage type (Note 1)	prem_out prem_in geo_out abrd_in mway_in mway_ard_in	Premises outdoor Premises indoor Geographic A and B roads (in-car) Motorways (in-car) Motorways and A roads (in-car)
Number of operators (Notes 2-4)	0, 1, 2, 3, 4	Maximum three MNOs for 2G and four for all other services

Notes:

- For 5G and 5G SA services, only outdoor coverage information is provided (prem_out and geo_out)

2. All 3G columns for 3 and 4 operators are empty, reflecting that two of the four MNOs have completed their 3G switch-off. We will remove all 3G columns once all 3G networks have been switched off.
3. All 5G SA columns for 4 operators are empty, reflecting that one of the MNOs does not yet deploy 5G SA services.
4. Coverage from at least one MNO can be calculated as 100% minus the percentage for coverage from 0 operators.

4G+5G combined

This file contains the data points provided on the page “Mobile Coverage: 4G+5G (MYM thresholds)” of the accompanying interactive report.¹

File name	Number of data rows	File size
202507_mobile_coverage_4G5G_r01.csv	1016	81 KB

Column headers and what they represent

Field	Values/Description
Level	Indicates the level of the location (UK, nation, local authority, Westminster parliamentary constituency) ²
Location code	UK, nation, local authority or Westminster parliamentary constituency code, such as W92000004
Location	UK, England, Northern Ireland, Scotland, Wales, local authority name or Westminster parliamentary constituency name
4G5G_[Threshold]_[Coverage type]_[Number of operators]	Percentage of premises or pixels in location for [Coverage type] with 4G and/or 5G coverage from [Number of operators] based on a signal strength threshold of -[Threshold]dBm. For example: 4G5G_105_prem_out_at_least_one: the percentage of premises with outdoor 4G or 5G coverage from at least one operator based on a signal strength threshold of -105dBm

Each file has 8 columns with coverage for the following combinations of signal strength threshold, coverage type and number of operators:

¹ Ofcom, [Map Your Mobile methodology – August 2025](#)

² The interactive report does not include information at devolved constituency level.

Variable	Values	Description/Notes
Threshold	105, 95	To indicate a signal strength threshold of -105dBm or -95dBm
Coverage type	prem_out, geo_out	Premises outdoor, Geographic
Number of operators	at_least_one, all	

Signal strength thresholds

We use the following signal strength thresholds when estimating coverage (further detail can be found in the Methodology Annex):

Service		Metric (see below)	Outdoor	Indoor and in-car
2G		RxLev	-81dBm	-71dBm
3G		RSCP CPiCH	-100dBm	-90dBm
4G		RSRP	-105dBm	-95dBm
Voice	2G	RxLev	-81dBm	-71dBm
	3G	RSCP CPiCH	-100dBm	-90dBm
	4G	RSRP	-105dBm	-95dBm
5G and 5G SA High Confidence		SS-RSRP	-110dBm	N/A
5G and 5G SA Very High Confidence		SS-RSRP	-100dBm	N/A

Metrics:

- RxLev: the Received Signal Level in 2G networks
- RSCP CPiCH: the Received Signal Code Power on the primary Common Pilot Channel for 3G networks
- RSRP: the Reference Signal Received Power in 4G networks
- SS-RSRP: the Synchronization Signal Reference Signal Received Power in 5G networks