

About this data: Mobile local and unitary authority

To create our Connected Nations Report update for 2018 Ofcom collected and analysed data from all the mobile network operators. This file contains mobile network coverage and data usage information from the operators, aggregated at local authority level.

The coverage data was collected as a snapshot in January 2018.

Due to variations in mobile performance over time, the file should not be regarded as a definitive and fixed view of the UK's mobile infrastructure. However, the information provided in this file may be useful in identifying variations in mobile performance by geography.

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

File Format

The file is provided as a Comma Separate Values file, with double quote (") text delimiters where applicable.

File name: 201801_mobile_laau_r01.csv

Total records in file: 1 header row, 391 data rows

File size on disk: 184 KB (188,416 bytes)

Column headers and what they represent:

Field	Label	Note
laau	Lower tier authority	Local and Unitary Authority Codes, such as E07000114
laau_name	Lower tier authority name	Local and Unitary Authority Names
2G_prem_out_0	2G services, premises (outdoor): no reliable signal (%)	Threshold:-81dBm
2G_prem_out_1	2G services, premises (outdoor): signal from 1 operator (%)	Threshold:-81dBm
2G_prem_out_2	2G services, premises (outdoor): signal from 2 operators (%)	Threshold:-81dBm
2G_prem_out_3	2G services, premises (outdoor): signal from all operators (%)	Threshold:-81dBm
2G_prem_in_0	2G services, premises (indoor): no reliable signal (%)	Threshold:-71dBm
2G_prem_in_1	2G services, premises (indoor): signal from 1 operator (%)	Threshold:-71dBm
2G_prem_in_2	2G services, premises (indoor): signal from 2 operators (%)	Threshold:-71dBm
2G_prem_in_3	2G services, premises (indoor): signal from all operators (%)	Threshold:-71dBm
2G_geo_out_0	2G services, geographic (outdoor): no reliable signal (%)	Threshold:-81dBm

2G_geo_out_1	2G services, geographic (outdoor): signal from 1 operator (%)	Threshold:-81dBm
2G_geo_out_2	2G services, geographic (outdoor): signal from 2 operators (%)	Threshold:-81dBm
2G_geo_out_3	2G services, geographic (outdoor): signal from all operators (%)	Threshold:-81dBm
2G_abrd_in_0	2G services, roads: no reliable signal (%)	Threshold:-71dBm
2G_abrd_in_1	2G services, roads: signal from 1 operator (%)	Threshold:-71dBm
2G_abrd_in_2	2G services, roads: signal from 2 operators (%)	Threshold:-71dBm
2G_abrd_in_3	2G services, roads: signal from all operators (%)	Threshold:-71dBm
2G_mway_in_0	2G services, motorways: no reliable signal (%)	Threshold:-71dBm
2G_mway_in_1	2G services, motorways: signal from 1 operator (%)	Threshold:-71dBm
2G_mway_in_2	2G services, motorways: signal from 2 operators (%)	Threshold:-71dBm
2G_mway_in_3	2G services, motorways: signal from all operators (%)	Threshold:-71dBm
3G_prem_out_0	3G services, premises (outdoor): no reliable signal (%)	Threshold:-100dBm
3G_prem_out_1	3G services, premises (outdoor): signal from 1 operator (%)	Threshold:-100dBm
3G_prem_out_2	3G services, premises (outdoor): signal from 2 operators (%)	Threshold:-100dBm
3G_prem_out_3	3G services, premises (outdoor): signal from 3 operators (%)	Threshold:-100dBm
3G_prem_out_4	3G services, premises (outdoor): signal from all operators (%)	Threshold:-100dBm
3G_prem_in_0	3G services, premises (indoor): no reliable signal (%)	Threshold:-90dBm
3G_prem_in_1	3G services, premises (indoor): signal from 1 operator (%)	Threshold:-90dBm
3G_prem_in_2	3G services, premises (indoor): signal from 2 operators (%)	Threshold:-90dBm
3G_prem_in_3	3G services, premises (indoor): signal from 3 operators (%)	Threshold:-90dBm
3G_prem_in_4	3G services, premises (indoor): signal from all operators (%)	Threshold:-90dBm
3G_geo_out_0	3G services, geographic (outdoor): no reliable signal (%)	Threshold:-100dBm
3G_geo_out_1	3G services, geographic (outdoor): signal from 1 operator (%)	Threshold:-100dBm
3G_geo_out_2	3G services, geographic (outdoor): signal from 2 operators (%)	Threshold:-100dBm
3G_geo_out_3	3G services, geographic (outdoor): signal from 3 operators (%)	Threshold:-100dBm
3G_geo_out_4	3G services, geographic (outdoor): signal from all operators (%)	Threshold:-100dBm
3G_abrd_in_0	3G services, roads: no reliable signal (%)	Threshold:-90dBm
3G_abrd_in_1	3G services, roads: signal from 1 operator (%)	Threshold:-90dBm
3G_abrd_in_2	3G services, roads: signal from 2 operators (%)	Threshold:-90dBm

3G_abrd_in_3	3G services, roads: signal from 3 operators (%)	Threshold:-90dBm
3G_abrd_in_4	3G services, roads: signal from all operators (%)	Threshold:-90dBm
3G_mway_in_0	3G services, motorways: no reliable signal (%)	Threshold:-90dBm
3G_mway_in_1	3G services, motorways: signal from 1 operator (%)	Threshold:-90dBm
3G_mway_in_2	3G services, motorways: signal from 2 operators (%)	Threshold:-90dBm
3G_mway_in_3	3G services, motorways: signal from 3 operators (%)	Threshold:-90dBm
3G_mway_in_4	3G services, motorways: signal from all operators (%)	Threshold:-90dBm
4G_prem_out_0	4G services, premises (outdoor): no reliable signal (%)	Threshold:-105dBm
4G_prem_out_1	4G services, premises (outdoor): signal from 1 operator (%)	Threshold:-105dBm
4G_prem_out_2	4G services, premises (outdoor): signal from 2 operators (%)	Threshold:-105dBm
4G_prem_out_3	4G services, premises (outdoor): signal from 3 operators (%)	Threshold:-105dBm
4G_prem_out_4	4G services, premises (outdoor): signal from all operators (%)	Threshold:-105dBm
4G_prem_in_0	4G services, premises (indoor): no reliable signal (%)	Threshold:-95dBm
4G_prem_in_1	4G services, premises (indoor): signal from 1 operator (%)	Threshold:-95dBm
4G_prem_in_2	4G services, premises (indoor): signal from 2 operators (%)	Threshold:-95dBm
4G_prem_in_3	4G services, premises (indoor): signal from 3 operators (%)	Threshold:-95dBm
4G_prem_in_4	4G services, premises (indoor): signal from all operators (%)	Threshold:-95dBm
4G_geo_out_0	4G services, geographic (outdoor): no reliable signal (%)	Threshold:-105dBm
4G_geo_out_1	4G services, geographic (outdoor): signal from 1 operator (%)	Threshold:-105dBm
4G_geo_out_2	4G services, geographic (outdoor): signal from 2 operators (%)	Threshold:-105dBm
4G_geo_out_3	4G services, geographic (outdoor): signal from 3 operators (%)	Threshold:-105dBm
4G_geo_out_4	4G services, geographic (outdoor): signal from all operators (%)	Threshold:-105dBm
4G_abrd_in_0	4G services, roads: no reliable signal (%)	Threshold:-95dBm
4G_abrd_in_1	4G services, roads: signal from 1 operator (%)	Threshold:-95dBm
4G_abrd_in_2	4G services, roads: signal from 2 operators (%)	Threshold:-95dBm
4G_abrd_in_3	4G services, roads: signal from 3 operators (%)	Threshold:-95dBm
4G_abrd_in_4	4G services, roads: signal from all operators (%)	Threshold:-95dBm
4G_mway_in_0	4G services, motorways: no reliable signal (%)	Threshold:-95dBm
4G_mway_in_1	4G services, motorways: signal from 1 operator (%)	Threshold:-95dBm
4G_mway_in_2	4G services, motorways: signal from 2 operators (%)	Threshold:-95dBm

4G_mway_in_3	4G services, motorways: signal from 3 operators (%)	Threshold:-95dBm
4G_mway_in_4	4G services, motorways: signal from all operators (%)	Threshold:-95dBm
Voice_prem_out_0	Voice services, premises (outdoor): no reliable signal (%)	See below for 2G, 3G, 4G threshold levels
Voice_prem_out_1	Voice services, premises (outdoor): signal from 1 operator (%)	See below for 2G, 3G, 4G threshold levels
Voice_prem_out_2	Voice services, premises (outdoor): signal from 2 operators (%)	See below for 2G, 3G, 4G threshold levels
Voice_prem_out_3	Voice services, premises (outdoor): signal from 3 operators (%)	See below for 2G, 3G, 4G threshold levels
Voice_prem_out_4	Voice services, premises (outdoor): signal from all operators (%)	See below for 2G, 3G, 4G threshold levels
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Voice_prem_in_2	Voice services, premises (indoor): signal from 2 operators (%)	See below for 2G, 3G, 4G threshold levels
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Voice_abrd_in_2	Voice services, roads: signal from 2 operators (%)	See below for 2G, 3G, 4G threshold levels
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Voice_mway_in_0	Voice services, motorways: no reliable signal (%)	See below for 2G, 3G, 4G threshold levels
Voice_mway_in_1	Voice services, motorways: signal from 1 operator (%)	See below for 2G, 3G, 4G threshold levels
Voice_mway_in_2	Voice services, motorways: signal from 2 operators (%)	See below for 2G, 3G, 4G threshold levels

Voice_mway_in_3	Voice services, motorways: signal from 3 operators (%)	See below for 2G, 3G, 4G threshold levels
Voice_mway_in_4	Voice services, motorways: signal from all operators (%)	See below for 2G, 3G, 4G threshold levels
Data_prem_out_0	Data services, premises (outdoor): no reliable signal (%)	See below for 2G, 3G, 4G threshold levels
Data_prem_out_1	Data services, premises (outdoor): signal from 1 operator (%)	See below for 2G, 3G, 4G threshold levels
Data_prem_out_2	Data services, premises (outdoor): signal from 2 operators (%)	See below for 2G, 3G, 4G threshold levels
Data_prem_out_3	Data services, premises (outdoor): signal from 3 operators (%)	See below for 2G, 3G, 4G threshold levels
Data_prem_out_4	Data services, premises (outdoor): signal from all operators (%)	See below for 2G, 3G, 4G threshold levels
Data_prem_in_0	Data services, premises (indoor): no reliable signal (%)	See below for 2G, 3G, 4G threshold levels
Data_prem_in_1	Data services, premises (indoor): signal from 1 operator (%)	See below for 2G, 3G, 4G threshold levels
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Data_mway_in_1	Data services, motorways: signal from 1 operator (%)	See below for 2G, 3G, 4G threshold levels
Data_mway_in_2	Data services, motorways: signal from 2 operators (%)	See below for 2G, 3G, 4G threshold levels

Data_mway_in_3	Data services, motorways: signal from 3 operators (%)	See below for 2G, 3G, 4G threshold levels
Data_mway_in_4	Voice services, motorways: signal from all operators (%)	See below for 2G, 3G, 4G threshold levels

Signal Thresholds

We use the following signal strength thresholds when estimating coverage:

Service	Metric	Outdoor	Indoor and in-car
2G	RxLev	-81dBm	-71dBm
3G	RSCP CPiCH	-100dBm	-90dBm
4G Voice	RSRP	-105dBm	-95dBm
4G Data	RSRP	-115dBm	-105dBm
Voice: 2G	RxLev	-81dBm	-71dBm
3G	RSCP CPiCH	-100dBm	-90dBm
4G	RSRP	-105dBm	-95dBm
Data: 3G	RSCP CPiCH	-100dBm	-90dBm
4G	RSRP	-115dBm	-105dBm