

How Should I Format My Clutter Data?

Data Fields

Mobile wireless broadband providers should list the loss value(s) associated with each clutter factor category used when creating their coverage maps. Clutter category data must be submitted in an Excel Workbook containing the following eight data fields. Sample data and an Excel template can be found at <https://www.fcc.gov/MF2-LTE-Collection>. Please enter your data in the Excel template for submission.

Field Name	Contents	Description	Type	Example
FRN	FCC Registration Number	10-digit FCC Registration Number used in FCC Form 477 filings	Text	0123456789
SOURCE	Clutter Data Source	Source of clutter data	Text	Forsk
CATNUM	Category Number	A numerical identifier corresponding to each clutter category	Integer	1
CATDESC	Category Description	A short description of the clutter category (e.g., Open Water; Developed, High Density; Deciduous Forest)	Text	Evergreen Forest
VMINLOSS	Minimum Variable Clutter Loss	For this clutter category, the minimum variable clutter loss (in dB/m) as a function of distance used in propagation modeling	Float	0.02
VMAXLOSS	Maximum Variable Clutter Loss	For this clutter category, the maximum variable clutter loss (in dB/m) as a function of distance used in propagation modeling	Float	0.04
CMINLOSS	Minimum Constant Clutter Loss	For this clutter category, the minimum constant clutter loss (in dB) used in propagation modeling	Float	11.2
CMAXLOSS	Maximum Constant Clutter Loss	For this clutter category, the maximum constant clutter loss (in dB) used in propagation modeling	Float	13.3

Some Examples

A valid Excel Workbook will contain only the eight fields described above and should look like this (with your company's data):

	A	B	C	D	E	F	G	H
	FRN	SOURCE	CATNUM	CATDESC	VMINLOSS	VMAXLOSS	CMINLOSS	CMAXLOSS
1	0123456789	Forsk	1	Evergreen Forest	0.02	0.04	11	13
2	0123456789	Forsk	2	Deciduous Forest	0.02	0.04	0	0
3	0123456789	Forsk	3	Open Water	0	0	5	7

Note that, for each clutter category, the values of at least one of the clutter loss ranges, variable or constant, must be greater than zero. In other words, either VMINLOSS and VMAXLOSS or CMINLOSS and CMAXLOSS should be greater than zero. Each of the records in the example above is acceptable

(although the loss values in these examples are not intended to be valid).

1. This category of clutter has both variable and constant loss values...

	A	B	C	D	E	F	G	H
	FRN	SOURCE	CATNUM	CATDESC	VMINLOSS	VMAXLOSS	CMINLOSS	CMAXLOSS
1	FRN							
2	0123456789	Forsk	1	Evergreen Forest	0.02	0.04	11	13
3	0123456789	Forsk	2	Deciduous Forest	0.02	0.04	0	0
4	0123456789	Forsk	3	Open Water	0	0	5	7
5								

2. Only variable clutter loss is meaningful for this category...

	A	B	C	D	E	F	G	H
	FRN	SOURCE	CATNUM	CATDESC	VMINLOSS	VMAXLOSS	CMINLOSS	CMAXLOSS
1	FRN							
2	0123456789	Forsk	1	Evergreen Forest	0.02	0.04	11	13
3	0123456789	Forsk	2	Deciduous Forest	0.02	0.04	0	0
4	0123456789	Forsk	3	Open Water	0	0	5	7
5								

3. Only constant clutter loss is meaningful for this category...

	A	B	C	D	E	F	G	H
	FRN	SOURCE	CATNUM	CATDESC	VMINLOSS	VMAXLOSS	CMINLOSS	CMAXLOSS
1	FRN							
2	0123456789	Forsk	1	Evergreen Forest	0.02	0.04	11	13
3	0123456789	Forsk	2	Deciduous Forest	0.02	0.04	0	0
4	0123456789	Forsk	3	Open Water	0	0	5	7
5								