

How Should I Format My Mobile Broadband Deployment Data?

What the Map Should Show

Mobile wireless broadband providers should submit polygons in a shapefile format representing geographic coverage nationwide (including U.S. territories) for each transmission technology deployed in each frequency band.

The data associated with each polygon should indicate the minimum advertised upstream and downstream data speeds associated with that network technology in that frequency band, and the coverage area polygon should depict the boundaries where users should expect to receive those advertised speeds. If your company advertises different minimum upstream and downstream speeds in different areas of the country using the same technology and frequency band (e.g., HSPA+ on AWS spectrum), then you should submit separate polygons showing the coverage area for each speed. A variation in technology, frequency band, or speed requires the submission of a separate polygon. If your company does not advertise the minimum upstream and/or downstream data speeds, then indicate the minimum upstream/downstream data speeds that users should expect to receive within the polygon depicting the geographic coverage area of the deployed technology in the given frequency band. For more information, see [Mobile Broadband Deployment Terms](#).

Data Fields

The following 5 data fields must accompany each polygon on the map. The field names must appear in the shapefile attribute table as shown below. Using the [template](#) as a foundation for your map will increase the chances that it will be accepted by the filing interface, making life easier for you and us.

Field Name	Contents	Description	Type	Example
DBA	DBA Name	Name of the entity customers could contact to purchase service in this area with the characteristics below	Text	Eastern Wireless
		Code for the technology used for the provision of service. The valid codes are:		
		80 WCDMA/UMTS/HSPA		
		81 HSPA+		
		82 EVDO/EVDO Rev A		
		83 LTE		
		84 WiMAX		
		85 CDMA		
		86 GSM		
		87 Analog		
		88 Other		
		Code for spectrum used for the provision of service. The valid codes are:		
		90 700 MHz Band		
		91 Cellular Band		
		92 Specialized Mobile Radio (SMR) Band		
		93 Advanced Wireless Services (AWS) 1 Band		
		94 Broadband Personal Communications Service (PCS) Band		
		95 Wireless Communications Service (WCS) Band		
		96 Broadband Radio Service/Educational Broadband Service Band		
		97 Satellite (e.g. L-band, Big LEO, Little LEO)		
		98 Unlicensed (including broadcast television “white spaces”) Bands		
		99 600 MHz		
		100 H Block		
		101 Advanced Wireless Services (AWS) 3 Band		
		102 Advanced Wireless Services (AWS) 4 Band		
		103 Other		
TECHNOLOGY	Technology of Transmission		Integer	81
SPECTRUM	Spectrum Used		Integer	91

MINDOWN	Minimum Advertised Downstream Bandwidth	The minimum advertised downstream bandwidth, or the downstream speed users should expect to receive in the coverage area, in Mbps. You can enter up to 3 places after the decimal (e.g., 768 kbps would be entered as 0.768).	Float	3
MINUP	Minimum Advertised Upstream Bandwidth	The minimum advertised upstream bandwidth, or the upstream speed users should expect to receive in the coverage area, in Mbps. You can enter up to 3 places after the decimal (e.g., 768 kbps would be entered as 0.768).	Float	0.768

Standards

1. All map areas must be closed, non-overlapping polygons with a single, unique identifier.
2. Any variation in any of the required fields necessitates the creation of a separate polygon showing the relevant coverage. In other words, each polygon must have a single value for each of the following fields: technology, spectrum, downstream bandwidth, and upstream bandwidth.
3. The shapefile must have an assigned projection with an accompanying .prj file.
4. The shapefile must use unprojected (geographic) WGS84 geographic coordinate system.
5. The coverage boundaries shall have a resolution of 100 meters (approximately three arc-seconds) or better. An arc-second represents the distance of latitude or longitude traversed on the earth's surface while traveling one second (1/3600th of a degree). See [ESRI Explanation of Measuring in Arc-Seconds](#). Three arc-seconds is a common resolution of terrain databases. See [USGS Standards for Digital Elevation Models](#), Part 1-General, at 1-2, 1-4.
6. The shapefile must be submitted as a *.zip file. This can be done with a program like WinZip or, in Windows by selecting the files associated with a shapefile, right-clicking the files, then clicking **Send to then Compressed (zipped) folder....** Be sure that your *.zip file contains one and only one shapefile.
7. In addition to the shapefile, each submitted *.zip file must include metadata or a plain text “readme” file that contains a comprehensive explanation of the methodology employed to generate the map layer including any necessary assumptions and an assessment of the accuracy of the finished product.