

## How Should I Format my Mobile Voice Deployment Data?

### What the Map Should Show

Facilities-based providers of mobile wireless voice service to end users should provide polygons in a shapefile format depicting their network coverage areas for commercially-available mobile voice service.

The polygons should reflect where users should expect to be able to make, maintain, and receive voice calls. A filer should submit separate polygons representing geographic coverage nationwide (including U.S. territories) for each voice transmission technology (e.g., GSM, CDMA) deployed in each frequency band. A variation in technology or frequency band would require the submission of a separate polygon. For more information, see [Mobile Voice Deployment Terms](#).

### Data Fields

The following 3 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
TECHNOLOGY	Technology of Transmission	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	Integer	81
SPECTRUM	Spectrum Used	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	Integer	91

## Standards

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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 coverage polygon. In other words, each polygon must have a single value for technology of transmission and spectrum used.
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 \*.zip file should 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.