DA 16-563

OMB Control No. 1161

May 19, 2016

**700 MHZ CONSTRUCTION AND REPORTING REQUIREMENTS AND RELATED DEADLINES**

By this Public Notice, the Wireless Telecommunications Bureau (Bureau) reminds certain 700 MHz (Lower A Block, B Block, and E Block, and Upper C Block) licensees of upcoming filing deadlines for construction notifications and performance status reports. The Bureau also updates the process for filing electronic maps in the shapefile format.

**Background**

In 2007 in the *700 MHz Second Report and Order*,the Commission established rules governing wireless licenses in the 700 MHz Band that, among other things, established interim and end-of-term construction benchmarks and status reporting requirements.[[1]](#footnote-1) These rules require Lower 700 MHz A, B, and E Block licensees to provide service sufficient to cover 35 percent of the geographic area of their licenses within four years, and 70 percent of this area within ten years (the license term). Upper 700 MHz C Block licensees are required to provide reliable service sufficient to cover 40 percent of the population of their license areas within four years and 75 percent of the population within ten years (the license term).[[2]](#footnote-2) For licensees that fail to meet the applicable interim benchmark, the rules specified that the license term would be reduced by two years and that the end-of-term benchmark must be metwithin eight years.[[3]](#footnote-3)

As part of its efforts to promote interoperability in the Lower 700 MHz Band, the Commission released the *Interoperability Report and Order* in 2013, which extended the interim construction deadline for Lower 700 MHz A and B Block licensees and removed the interim construction deadline for certain A Block licensees adjacent to Channel 51 operations.[[4]](#footnote-4) The Commission also extended the interim and final deadlines for E Block licensees and permitted a showing of population coverage, rather than geographic coverage.[[5]](#footnote-5) In addition, the Commission waived the deadline to file the second status report for Lower 700 MHz A and B Block licensees (other than A Block licensees required to protect Channel 51 operations) and extended the deadline for Lower 700 MHz E Block licensees.[[6]](#footnote-6) The existing deadlines are described in detail below.

**Lower 700 MHz Construction Notification Deadlines**

*Lower 700 MHz A and B Block licensees.* As established by the *700 MHz Second Report and Order* and extended by the *Interoperability Report and Order*, Lower 700 MHz A and B Block licensees (other than licensees subject to a waiver of the interim construction benchmark deadline due to Channel 51 interference protection requirements) must meet their interim construction deadline by **December 13, 2016**.[[7]](#footnote-7) As established by the *700 MHz Second Report and Order,* all Lower 700 MHz A and B Block licensees who meet the interim construction requirement must meet their final construction deadline by **June 13, 2019**.[[8]](#footnote-8) If a licensee fails to meet the interim construction benchmark, the term of its license is reduced by two years and the licensee must meet the final construction deadline by **June 13, 2017**.[[9]](#footnote-9)

*Lower 700 MHz A Block licensees required to protect Channel 51 licensees.* In the *Interoperability Report and Order,* the Commission waived the interim construction deadline for Lower 700 MHz A Block licensees that must protect Channel 51 licensees.[[10]](#footnote-10) These licensees must meet the final construction deadline by **June 13, 2019**.[[11]](#footnote-11)

*Upper 700 MHz C Block licensees.* Upper 700 MHz C Block licensees are subject to the original filing deadlines as established in the *700 MHz Second Report and Order.*[[12]](#footnote-12)The interim construction deadline was **June 13, 2013**, and the final construction deadline is **June 13, 2019**.[[13]](#footnote-13) However, if a licensee fails to meet the interim construction benchmark, the term of its license is reduced by two years and the licensee must meet its final construction deadline by **June 13, 2017**.[[14]](#footnote-14)

*Lower 700 MHz E Block licensees.* As established by the *700 MHz Second Report and Order* and extended by the *Interoperability Report and Order*, Lower 700 MHz E Block licensees must meet their interim construction deadline by **March 7, 2017**, and must meet their final construction deadline by **March 7, 2021**.[[15]](#footnote-15) As established by the *Interoperability Report and Order,* if a licensee fails to meet the interim construction benchmark, the term of its license is reduced by one year and the licensee must meet the final construction deadline **by March 7, 2020**.[[16]](#footnote-16)

We remind licensees that notifications of construction are due within 15 days of the construction deadline.[[17]](#footnote-17)

**Procedure for Public Comment on 700 MHz Construction Notifications**

In the *700 MHz Second Report and Order*, the Commission stated that “the public will be given an opportunity to review and comment” on construction notifications filed by certain 700 MHz licensees.[[18]](#footnote-18) The public may use the procedure specified in this Public Notice to comment on construction notifications filed by 700 MHz licensees holding the following authorizations: 1. Economic Area (EA) authorizations for A Block in the 698-704 MHz and 728-734 MHz bands; 2. Cellular Market Area (CMA) authorizations for B Block in the 704-710 MHz and 734-740 MHz bands; 3. EA authorizations for Block E in the 722-728 MHz band; or 4. Regional Economic Area Grouping (REAG) authorizations for Block C in the 746-757 MHz and 776-787 MHz bands.

*Comment Period.* Consistent with the *700 MHz Second Report and Order*, the Bureau will review each construction notification and any related comments prior to making a determination regarding the notification.[[19]](#footnote-19) Specifically, the Bureau will place applicable 700 MHz construction notifications on its weekly Market-Based Applications Accepted for Filing Public Notice. Interested parties will then be permitted to file comments, which must be filed no later than 30 days after the Public Notice release date.

*Filing Procedure.* Parties must file comments electronically through the Bureau's website at <http://wireless.fcc.gov/uls>. After opening the Bureau's Universal Licensing System (ULS) webpage (http:// wireless.fcc.gov/uls), select “Submit a Pleading” located under the quick link options (under “Systems”) located on the bottom of the page. Upon reaching the Non-docketed Pleadings page, select the “700 MHz Construction Notification Comment” option from the Pleading Type drop-down menu, and follow the subsequent instructions to submit a comment.

*Ex Parte* *Status.*  The Bureau seeks to facilitate communications regarding 700 MHz construction notifications between Commission staff and interested parties. We find that, consistent with section 1.1200(a) of the Commission's rules, the public interest will be served by designating staff review of 700 MHz construction notifications and any related public comments as “exempt” under section 1.1204 of the Commission's rules.[[20]](#footnote-20)

**Lower 700 MHz Second Status Report Deadlines**

*Lower 700 MHz A and B Block licensees.* Lower 700 MHz A and B Block licensees (other than licensees subject to a waiver of the interim construction benchmark deadline due to Channel 51 interference protection requirements, as described above) are not required to file a second status report regarding a licensee’s efforts to meet performance requirements. This requirement was waived in the *Interoperability Report and Order* because, as a result of the extended interim construction deadline, licensees will file similar information in their construction notifications shortly after the original deadline for the second status reports.[[21]](#footnote-21)

*Lower 700 MHz A Block licensees required to protect Channel 51 licensees.* Lower 700 MHz A Block licensees required to protect Channel 51 licensees must file their second status report no later than **June 13, 2016** and no sooner than 30 days prior.[[22]](#footnote-22) Since these licensees are not required to file interim construction notifications, this will allow the Commission to monitor their buildout progress.[[23]](#footnote-23)

*Upper 700 MHz C Block licensees.* Upper 700 MHz C Block licensees are subject to the original filing deadlines as established in the *700 MHz Second Report and Order* and must file their second status report no later than **June 13, 2016** and no sooner than 30 days prior.[[24]](#footnote-24)

*Lower 700 MHz E Block licensees.* As extended by the *Interoperability Report and Order,* Lower 700 MHz E Block licensees must file their second status report by **March 7, 2019**.[[25]](#footnote-25)

**Content of Second Status Reports**

For licensees that are required to file a second status report, the report must include the date the license term commenced and the steps the licensee will take or has taken towards timely meeting its construction deadlines, including:

* The technology or technologies being deployed (*e.g.*, LTE), or that the licensee plans to deploy.
* The service(s) being provided (*e.g.*, mobile voice, mobile data, fixed voice, fixed data), or the service(s) the licensee intends to provide.
* The areas where the licensee is providing service.[[26]](#footnote-26)

Licensees may illustrate the areas where they are providing service in narrative form or with Portable Document Format (PDF) maps, noting which license is associated with service in a particular area.

The Bureau recognizes that many licensees hold multiple 700 MHz licenses. For administrative ease, we encourage such licensees to file a consolidated status report. This consolidated status report must be filed with each license and must provide the required information on a license-by-license basis.

**Updatesto Procedures for Filing Shapefile Maps**

On October 16, 2015 the Bureau released a public notice establishing the format for filing electronic maps associated with certain 700 MHz licensee construction notifications.[[27]](#footnote-27) The Public Notice also identified the documentation to be filed with the 700 MHz construction notifications. Specifically, licensees must file electronic maps in shapefile format in addition to a PDF map and a technical narrative. The Bureau makes the following technical changes to the *700 MHz Electronic Maps Public Notice*:

1. We remove the “LAT\_DD” and “LON\_DD” fields from **only** the Signal Coverage Attributes table.
2. We make two changes to the “Standards” section. First, we have updated the URL in Standard #1 for accessing template and market based boundary files. Second, we have updated the resolution requirement for coverage boundaries from 10 meters to 100 meters in Standard #5. The updated standards are listed below.
3. The templates and market based boundary files related to the 700 MHz Band service can be found at <https://www.fcc.gov/general/700-mhz-construction-notification-requirements>.
4. The coverage boundaries must 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.

An updated description of the filing procedure and the required contents, including the above technical changes, for a shapefile can be found in Attachment A of this Public Notice. Shapefile maps must comply with the requirements listed in this Public Notice[[28]](#footnote-28) and then must be converted into a Zip-file format prior to attaching to the application in the ULS attachment utility.

*Requests for Confidentiality.* To the extent that a licensee believes that its shapefile map should be afforded confidential treatment by the Commission, Licensees may file a request for confidentiality of shapefile maps via ULS. Such requests must set forth in an attachment to the notification of construction the licensee’s reasons for withholding the information from public inspection pursuant to section 0.459(b) of the Commission’s rules.[[29]](#footnote-29) Specifically, when attaching a Zip-file formatted shapefile map in the ULS attachment utility, use the drop-down box to select the “Confidential GIS Map Files” option. Use the “Browse” button and select the relevant zipped GIS map files. Provide a brief description of these files in the “Description” field. Click the “Add Attachment” button to upload and attach the zipped map files to the construction notification.

Pursuant to section 0.459 of the Commission’s rules, parties seeking confidential treatment of a portion of a filing must submit a redacted version (in electronic format), or an affidavit stating that it is impossible to submit a redacted document.[[30]](#footnote-30) For purposes of meeting this section, when a licensee seeks confidentiality of a shapefile map, the PDF version of the map will be considered a redacted version, required for public inspection, of the shapefile.

Questions regarding this Public Notice may be directed to Amanda Huetinck, Attorney Advisor, Wireless Telecommunications Bureau, Mobility Division, at (202) 418-7090 or amanda.huetinck@fcc.gov.

By the Chief, Mobility Division, Wireless Telecommunications Bureau.

-FCC-

**Attachment A**

**Shapefile Contents and Submission Process**

**(Effective May 19, 2016)**

**Shapefile Map Submission**

Covered 700 MHz Band Licensees must submit shapefiles with construction notifications in the format (including the content) described in this attachment.

Covered 700 MHz Band Licensees must attach electronically filed GIS Map Files[[31]](#footnote-31) to the construction notification in the Universal Licensing System (ULS) using compatible software and the map file format. Shapefile maps must comply with the requirements listed in this attachment, and then must be converted into a Zip-file format prior to attaching to the application.[[32]](#footnote-32) After a map is properly formatted, in the ULS attachment utility, use the drop-down box to select the “GIS Map Files” option. Use the “Browse” button and select the relevant zipped GIS map files. Provide a brief description of these files in the “Description” field. Click the “Add Attachment” button to upload the zipped map files to attach the map to the construction notification.

**Shapefile Format**

The map files must be submitted in shapefile format and include the content described in this attachment. The table structure and naming convention must be submitted as outlined below, and at a minimum, the following “Types” must be included in the submission:

**Signal Coverage:** The minimum acceptable received signal level used to provide signal coverage.

Format: Polygons

File Naming: Market\_Block\_Callsign\_Signal\_Coverage\_MapDate – i.e., CMAxxx\_A\_ABCD123\_signal\_coverage\_20150101[[33]](#footnote-33)

**Excluded Federal/State Government Lands:** Federal/State Government Lands excluded from the geographic service area (if the licensee chooses to exclude).

Format: Polygons

File Naming: Market\_Block\_Callsign\_Ex\_Fed\_State\_Land\_MapDate – i.e., CMAxxx\_A\_ABCD123\_ex\_fed\_state\_land\_20150101

**Transmitter Site(s):** Transmitter site(s) that contribute to the signal coverage within the relevant geographic service area.

Format: Points

File Naming: Market\_Block\_Callsign\_Transmit\_Sites\_MapDate – i.e., CMAxxx\_A\_ABCD123\_transmit\_sites\_20150101

**Data Fields**

The following data fields must accompany **each** polygon/point on the map. The field names must appear in the shapefile attribute table exactly as shown below:

**Signal Coverage Attributes**

| **Field Name** | **Contents** | **Description** | **Type** | **Example** |
| --- | --- | --- | --- | --- |
| LICENSEE | Licensee Name | Name of the entity providing coverage in this area.[[34]](#footnote-34) | text (200) | Eastern Wireless |
| FRN | FCC Registration Number | A 10-digit number that is assigned to a business or individual used to identify the registrant’s business dealings with the FCC. | text (12) | 0002505283 |
| CALL\_SIGN | Call Sign | A combination of letters and numbers that identify an FCC license. | text (10) | WQJU644 |
| RS | Radio Service Code | A unique 2-letter code used in ULS to designate each wireless radio service. The valid codes are:  WU – 700 MHz Upper Band (Block C)  WX – 700 MHz Guard Band  WY – 700 MHz Lower Band (Blocks A, B, & E)  WZ – 700 MHz Lower Band (Blocks C, D). | text (2) | WY |
| BLOCK | Channel Block | A group of channels assigned together, not individually. | text (4) | A |
| MARKET | Market Designation | A standard geographic area used by the FCC for administrative convenience in the licensing of systems. | text (6) | CMA323 |
| MAP\_DATE | Map Date | The date the map was created. | date | 06/15/2015 |
| TYPE | Type of GIS File | The type of GIS file. The valid code is:  SC= Signal Coverage. | text (2) | SC |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field Name** | **Contents** | **Description** | **Type** | **Example** |
| TECH | 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. | numeric (2) | 81 |
| MIN\_DOWN | Minimum Advertised Downlink Target Data Rate | The minimum advertised downlink target data rate users should expect to receive in the coverage area, in Mbps. You may enter up to 3 places after the decimal (*e.g.*, 768 kbps would be entered as 0.768). | numeric (6,3) | 3 |
| MIN\_UP | Minimum Advertised Uplink Target Data Rate | The minimum advertised uplink target data rate users should expect to receive in the coverage area, in Mbps. You may enter up to 3 places after the decimal (*e.g.*, 768 kbps would be entered as 0.768). | numeric (6,3) | 0.768 |
| COV\_AREA | Coverage Area | The licensed area in sq miles covered with a reliable signal. Rounded to the nearest 100th. For CMA & EA licenses only. | numeric (9,2) | 1230.45 |
| TOTAL\_AREA | Total Area | The total licensed area in sq miles. Rounded to the nearest 100th. For CMA & EA licenses only. | numeric (9,2) | 2543.62 |
| PCCOV\_AREA | Percentage of Area Covered | Percent of area covered with a reliable signal. Rounded to the nearest 10th. | numeric (4,1) | 73.2 |
| POP\_COV | Population Covered | The 2010 population covered with a reliable signal. Per EA for REAG licenses only. | numeric (9) | 54231 |
| TOTAL\_POP | Total Population | The total population of the market in which service is being provided using 2010 census. Per EA for REAG licenses only. | numeric (9) | 79589 |
| PCPOP\_COV | Percentage of Population Covered | Percentage of 2010 population covered with a reliable signal. Rounded to the nearest 10th. | numeric (4,1) | 67.4 |

**Federal/State Government Land Attributes**

| **Field Name** | **Contents** | **Description** | **Type** | **Example** |
| --- | --- | --- | --- | --- |
| LICENSEE | Licensee Name | Name of the entity providing coverage in this area. | text (200) | Eastern Wireless |
| FRN | FCC Registration Number | A 10-digit number that is assigned to a business or individual used to identify the registrant’s business dealings with the FCC. | text (12) | 0002505283 |
| CALL\_SIGN | Call Sign | A combination of letters and numbers that identify an FCC license. | text (10) | WQJU644 |
| RS | Radio Service Code | A unique 2-letter code used in ULS to designate each wireless radio service. The valid codes are:  WU – 700 MHz Upper Band (Block C)  WX – 700 MHz Guard Band  WY – 700 MHz Lower Band (Blocks A, B, & E)  WZ – 700 MHz Lower Band (Blocks C, D) | text (2) | WY |
| BLOCK | Channel Block | A group of channels assigned together, not individually. | text (4) | A |
| MARKET | Market Designation | A standard geographic area used by the FCC for administrative convenience in the licensing of systems. | text (6) | CMA323 |
| MAP\_DATE | Map Date | The date the map was created. | date | 06/15/2015 |
| TYPE | Type of GIS File | The type of GIS file. The valid code is:  F=Federal Government Land.  S=State Government Land. | text (2) | F |
| DES\_NAME | Designation Name | The name of the Federal and/or State government land being excluded. | text (200) | Navy DOD |
| GIS\_SOURCE | GIS Source | The source of Federal and/or State government lands being excluded. | text (200) | DOA |
| DAT\_SOURCE | Date Source | The year of the source used for Federal and/or State government lands. | text (4) | 2007 |
| GOV\_AREA | Government Area | The Federal and/or State government land area in sq miles being excluded from the total market area. For CMA and EA licenses only. | numeric (10) | 278 |

**Transmitter Site Attributes**

| **Field Name** | **Contents** | **Description** | **Type** | **Example** |
| --- | --- | --- | --- | --- |
| LICENSEE | Licensee Name | Name of the entity providing coverage in this area. | text (200) | Eastern Wireless |
| FRN | FCC Registration Number | A 10-digit number that is assigned to a business or individual used to identify the registrant’s business dealings with the FCC. | text (12) | 0002505283 |
| CALL\_SIGN | Call Sign | A combination of letters and numbers that identify an FCC license. | text (10) | WQJU644 |
| RS | Radio Service Code | A unique 2-letter code used in ULS to designate each wireless radio service. The valid codes are:  WU – 700 MHz Upper Band (Block C)  WX – 700 MHz Guard Band  WY – 700 MHz Lower Band (Blocks A, B, & E)  WZ – 700 MHz Lower Band (Blocks C, D). | text (2) | WY |
| BLOCK | Channel Block | A group of channels assigned together, not individually. | text (4) | A |
| MARKET | Market Designation | A standard geographic area used by the FCC for administrative convenience in the licensing of systems. | text (6) | CMA323 |
| MAP\_DATE | Map Date | The date the map was created | date | 06/15/2015 |
| TYPE | Type of GIS File | The type of GIS file. The valid code is:  T=Transmitter Sites. | text (2) | T |
| LAT\_DD | Latitude in Decimal Degrees | The latitude associated with the polygon, point, or polyline. | numeric (10,6) | 45.567823 |
| LON\_DD | Longitude in Decimal Degrees | The longitude associated with the polygon, point, or polyline. | numeric (10,6) | -120.568234 |

**Standards**

1. Templates and market based boundary files related to the 700 MHz Band service can be found at <https://www.fcc.gov/general/700-mhz-construction-notification-requirements>.

2. All map areas must be closed, non-overlapping polygons with a single, unique identifier. If available, run ESRI geoprocessing tool “Repair Geometry” before submitting the shapefile.

3. The shapefile must have an assigned projection with an accompanying .prj file.

4. The shapefile must use WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere geographic coordinate system. If not available, then use WGS 1984.

5. The coverage boundaries must 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. Shapefile must be submitted as a \*.zip file, which includes SHP, SHX, DBF, and PRJ files type. Multiple shapefiles can be combined into a single zip and uploaded via the attachment module 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.”**

7. In addition to the shapefile, each submitted \*.zip file must include metadata (XML file type) or a plain text “readme” file (TXT file type; the filename must be the same as the shapefile name) that contains a comprehensive explanation of the methodology employed to generate the map layer including any necessary assumptions and an accuracy assessment of the finished product. Although not required, FCC prefers to receive geospatial metadata in the ISO 191\*\* series standards, which includes ISO 19115 and ISO 19139 among others. *See* <https://www.fgdc.gov/metadata/geospatial-metadata-tools>. <http://help.arcgis.com/en/arcgisdesktop/10.0/help/index.html#/Choosing_a_metadata_style/003t00000009000000>. If metadata tools are not implemented, then please provide the following information along with the methodology: core library catalog elements such as Title, Abstract, and Publication Data; geographic elements such as Geographic Extent and Projection Information; and database elements such as Attribute Label Definitions and Attribute Domain Values.

**Requests for Confidentiality**

Licensees may file a request for confidentiality of shapefile maps via ULS. Shapefile maps must comply with the requirements listed in this Public Notice and then must be converted into a Zip-file format prior to attaching to the application. After a map is properly formatted, in the ULS attachment utility, use the drop-down box to select the “Confidential GIS Map Files” option. Use the “Browse” button and select the relevant zipped GIS map files. Provide a brief description of these files in the “Description” field. Click the “Add Attachment” button to upload and attach the zipped map files to the construction notification.

Pursuant to section 0.459 of the Commission’s rules, parties seeking confidential treatment of a portion of a filing must submit a redacted version (in electronic format), or an affidavit stating that it is impossible to submit a redacted document.[[35]](#footnote-35) For purposes of meeting this section, when a licensee seeks confidentiality of a shapefile map, the PDF version of the map will be considered a redacted version, required for public inspection, of the shapefile.

1. *See Service Rules for 698-746, 747-762, and 777-792 MHz Bands*, Second Report and Order, 22 FCC Rcd 15289 (2007) (*700 MHz Second Report and Order*). [↑](#footnote-ref-1)
2. 47 C.F.R. §§ 27.14(g)-(h). [↑](#footnote-ref-2)
3. *Id.* at 27.14(g)(1), (h)(1). In cases where the end-of-term benchmark is not met, portions of the license where service is not provided terminate automatically. *Id.* at 27.14 (g)(2), (h)(2). [↑](#footnote-ref-3)
4. *See Promoting Interoperability in the 700 MHz Commercial Spectrum*, Report and Order and Order of Proposed Modification*,* 28 FCC Rcd 15122, 15151-52, para. 65 (2013) (*Interoperability Report and Order*). [↑](#footnote-ref-4)
5. *Id.* at 15147-49, paras. 56-59. [↑](#footnote-ref-5)
6. *Id.* at 15149, 15152-53, paras. 59, 66. [↑](#footnote-ref-6)
7. *700 MHz Second Report and Order,* 22 FCC Rcd at 15348, 15349, paras. 153, 157; *Interoperability Report and Order,* 28 FCC Rcdat 15151, para. 64. [↑](#footnote-ref-7)
8. *700 MHz Second Report and Order*, 22 FCC Rcdat 15293-94, 15349, paras. 6, 157. [↑](#footnote-ref-8)
9. *Id.* at 15345, 15348-49, paras. 153, 147. [↑](#footnote-ref-9)
10. *Interoperability Report and Order,* 28 FCC Rcd at 15151-52, para. 65. [↑](#footnote-ref-10)
11. 47 C.F.R. § 27.14(h). [↑](#footnote-ref-11)
12. *700 MHz Second Report and Order*, 22 FCC Rcdat 15351, para. 162. [↑](#footnote-ref-12)
13. 47 C.F.R. § 27.14(h). [↑](#footnote-ref-13)
14. *Id.* at § 27.14(h)(1); *700 MHz Second Report and Order*, 22 FCC Rcdat 15351, para. 163. [↑](#footnote-ref-14)
15. *Interoperability Report and Order,* 28 FCC Rcd at 15147-48, para. 56. [↑](#footnote-ref-15)
16. *Id.* at 15148, para. 58. [↑](#footnote-ref-16)
17. *See* 47 C.F.R. § 1.946(d). [↑](#footnote-ref-17)
18. *700 MHz Second Report and Order,* 22 FCC Rcd at 15353, para. 169. [↑](#footnote-ref-18)
19. *Id.* [↑](#footnote-ref-19)
20. 47 C.F.R. §§ 1.1200(a), 1.1204. [↑](#footnote-ref-20)
21. *Interoperability Report and Order*, 28 FCC Rcd at 15152-53, para. 66. [↑](#footnote-ref-21)
22. 47 C.F.R. § 27.14(l). [↑](#footnote-ref-22)
23. *Interoperability Report and Order,* 28 FCC Rcd at 15153-53, para. 66. [↑](#footnote-ref-23)
24. 47 C.F.R. § 27.14(l). [↑](#footnote-ref-24)
25. *Interoperability Report and Order,* 28 FCC Rcd at 15149, para. 59. [↑](#footnote-ref-25)
26. *See* 47 C.F.R. § 27.14(l); *700 MHz Second Report and Order*, 22 FCC Rcd at 15352, para. 165. [↑](#footnote-ref-26)
27. *Wireless Telecommunications Bureau Establishes Electronic Map Format for Covered 700 MHz Band License Construction Notifications*, Public Notice, 30 FCC Rcd 11407 (WTB 2015) (*700 MHz Electronic Maps Public Notice*). [↑](#footnote-ref-27)
28. *Supra* Attachment A. [↑](#footnote-ref-28)
29. *See* 47 C.F.R. § 0.459(b). [↑](#footnote-ref-29)
30. *See* 47 C.F.R. § 0.459(a)(2). [↑](#footnote-ref-30)
31. A shapefile is a type of GIS Map File. [↑](#footnote-ref-31)
32. The Zip-file format is a data compression and archive format available in the public domain. [↑](#footnote-ref-32)
33. If an ESRI product is used to produce the map files, please add region and point to the feature class (CMAxxx\_A\_ABCD123\_signal\_coverage\_20150101\_region and CMAxxx\_A\_ABCD123\_transmit\_sites\_2015\_01\_01\_point). If MapInfo is used to produce the map files (prior to submitting via ULS), label as above. The Universal Translator will add region and point to the end of the file name. [↑](#footnote-ref-33)
34. Substitute all special characters and whitespaces with underscores. There should be no leading or trailing whitespaces. [↑](#footnote-ref-34)
35. *See* 47 C.F.R. § 0.459(a)(2). [↑](#footnote-ref-35)