

700 MHz Band
Auctions 73 and 76 Seminar

Overview of Due Diligence and
Licensing Parameters

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November 20, 2007

Disclaimer

Nothing herein is intended to supersede any provision of the Commission's rules or public notices. These slides should not be used as a substitute for a prospective applicant's review of the Commission's relevant orders, rules, and public notices. Prospective applicants must familiarize themselves thoroughly and remain current with the Commission's rules, Orders, and Public Notices relating to the 700 MHz Band service, rules relating to application and auction procedures, and the procedures, terms and conditions contained in the Auctions 73 and 76 public notices.

Auction 73 Licenses

1,099 Total Licenses

Frequency Block	Available Licenses	Area Type
A	176	EA
B	734	CMA
E	176	EA
C	12	REAG
D	1	Nationwide

700 MHz Band Spectrum Auction 73

Block	Pairing	Frequency Bands	Bandwidth
A	6 MHz/6 MHz paired	698 – 704, 728 – 734 MHz	12
B	6 MHz/6 MHz paired	704 – 710, 734 – 740 MHz	12
E	6 MHz unpaired	722 – 728 MHz	6
C	11 MHz/11 MHz paired	746 – 757, 776 – 787 MHz	22
D	5 MHz/5 MHz paired	758 – 763, 788 – 793 MHz	10

Auction 73

Revised 700 MHz Band Plan

									757	763	775	787	793	805				
A	B	C	D	E	A	B	C		A	D	Public Safety	B	C	A	D	Public Safety	B	
CH. 52	CH. 53	CH. 54	CH. 55	CH. 56	CH. 57	CH. 58	CH. 59	CH. 60	CH. 61	CH. 62	CH. 63	CH. 64	CH. 65	CH. 66	CH. 67	CH. 68	CH. 69	
698	704	710	716	722	728	734	740	746	752	758	764	770	776	782	788	794	800	806

**LOWER 700 MHz BAND
(CHANNELS 52-59)**

**UPPER 700 MHz BAND
(CHANNELS 60-69)**

Block	Frequencies	Bandwidth	Pairing	Area Type	Licenses
A	698-704, 728-734	12 MHz	2 x 6 MHz	EA	176
B	704-710, 734-740	12 MHz	2 x 6 MHz	CMA	734
C	710-716, 740-746	12 MHz	2 x 6 MHz	CMA	734*
D	716-722	6 MHz	unpaired	EAG	6*
E	722-728	6 MHz	unpaired	EA	176
C	746-757, 776-787	22 MHz	2 x 11 MHz	REAG	12
D	758-763, 788-793	10 MHz	2 x 5 MHz	Nationwide	1**
A	757-758, 787-788	2 MHz	2 x 1 MHz	MEA	52***
B	775-776, 805-806	2 MHz	2 x 1 MHz	MEA	52***

*Blocks have been auctioned.

**Block is associated with the 700 MHz Public/Private Partnership.

***Guard Bands blocks have been auctioned, but are being relocated.

Auction 76 Licenses

Potentially 1,275 Total Licenses

Frequency Block	Available Licenses	Area Type
A	176	EA
B	734	CMA
E	176	EA
C1	176	EA
C2	12	REAG
D	1	Nationwide

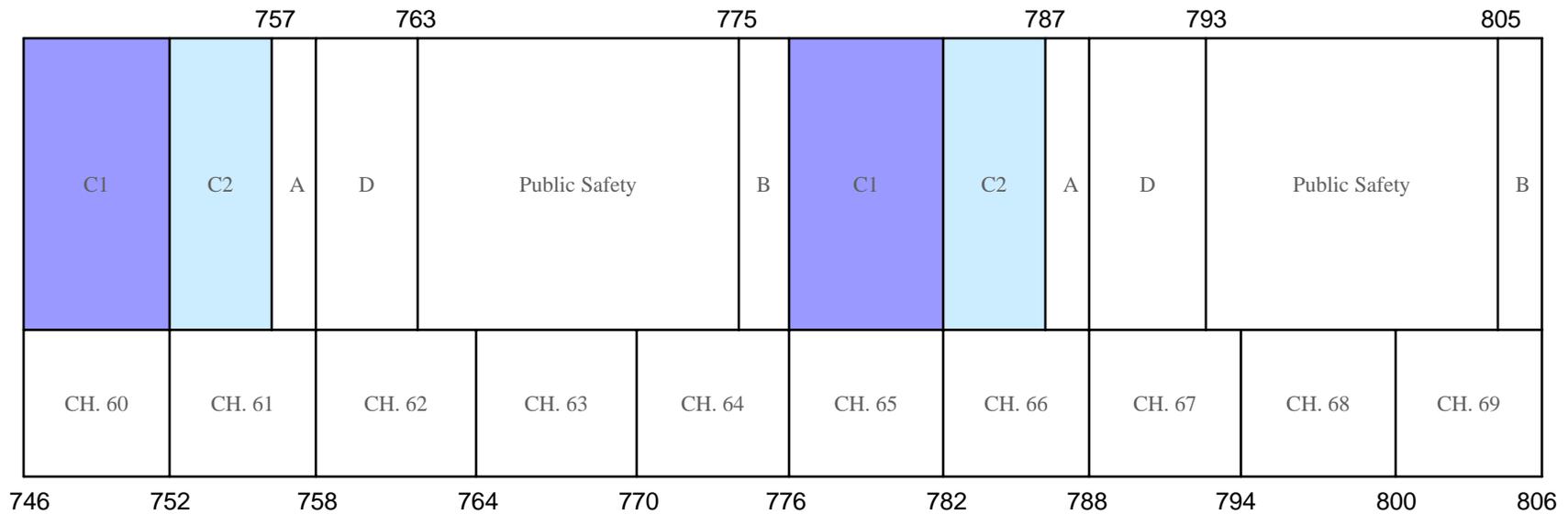
700 MHz Band Spectrum Auction 76

Block	Pairing	Frequency Bands	Bandwidth
A	6 MHz/6 MHz paired	698 – 704, 728 – 734 MHz	12
B	6 MHz/6 MHz paired	704 – 710, 734 – 740 MHz	12
E	6 MHz unpaired	722 – 728 MHz	6
C1	6 MHz/6 MHz paired	746 – 752, 776 – 782 MHz	12
C2	5 MHz/5 MHz paired	752 – 757, 782 – 787 MHz	10
D	5 MHz/5 MHz paired	758 – 763, 788 – 793 MHz	10

Auction 76

Revised 700 MHz C Block

Alternative C Block Plan



<u>Block</u>	<u>Frequencies (MHz)</u>	<u>Bandwidth</u>	<u>Pairing</u>	<u>Area Type</u>	<u>Licenses</u>
C1	746-752, 776-782	12 MHz	2 x 6 MHz	EA	176
C2	752-757, 782-787	10 MHz	2 x 5 MHz	REAG	12

License Period

- 698-710, 722-740, 746-757, 758-763, 776-787, and 788-793 MHz bands:
- Initial authorizations will extend for a term not to exceed ten years from February 17, 2009, except that initial authorizations for a Part 27 licensee that provides broadcast services, whether exclusively or in combination with other services, will not exceed eight years.

Auction 73 Performance Requirements

- Performance Requirements: Interim and end-of-term benchmarks, with geographically-based build-out benchmarks for CMA and EA licenses, and population-based benchmarks for REAG licenses. Any licensee that fails to meet the 4-year, interim geographic or population benchmark has its license term reduced from ten to eight years, thus requiring the licensee to meet the end-of-term benchmark at an accelerated schedule.
 - If a licensee fails to meet its end of term benchmark, its authorization to operate will terminate automatically without Commission action for those geographic areas of its license authorization in which the licensee is not providing service, and those unserved areas will become available for reassignment by the Commission.
- See § 27.14

Performance Requirements for Licenses Sold Under Auction 73

Channel Block	Spectrum	Market	First Buildout	Second Buildout	Third Buildout
A	698-704 MHz, 728-734 MHz	EA	35% of geographic area no later than 2/17/2013	70% of geographic area by the end of the license term	N/A
B	704-710 MHz, 734-740 MHz	CMA	35% of geographic area no later than 2/17/2013	70% of geographic area by the end of the license term	N/A
E	722-728 MHz	EA	35% of geographic area no later than 2/17/2013	70% of geographic area by the end of the license term	N/A
C	746-757 MHz, 776-787 MHz	REAG	40% of population in each EA no later than 2/17/2013	75% of population in each EA by the end of the license term	N/A
D	758-763 MHz, 788-793 MHz	NWA	75% of population no later than 2/17/2013	95% of population no later than 2/17/2016	99.3% of population by the end of the license term

Auction 76 Performance Requirements

- Performance Requirements: Interim and end-of-term benchmarks, with population-based build-out benchmarks for CMA, EA, and REAG licenses. Any licensee that fails to meet the 4-year, interim population benchmark has its license term reduced from ten to eight years, thus requiring the licensee to meet the end-of-term benchmark at an accelerated schedule.
 - If a licensee fails to meet its end of term benchmark, its authorization to operate will terminate automatically without Commission action for those geographic areas of its license authorization in which the licensee is not providing service, and those unserved areas will become available for reassignment by the Commission.
- See § 27.14

Performance Requirements for Licenses if Sold in Auction 76

Channel Block	Spectrum	Market	First Buildout	Second Buildout	Third Buildout
A	698-704 MHz, 728-734 MHz	EA	40% of population no later than 2/17/2013	75% of population by the end of the license term	N/A
B	704-710 MHz, 734-740 MHz	CMA	40% of population no later than 2/17/2013	75% of population by the end of the license term	N/A
E	722-728 MHz	EA	40% of population no later than 2/17/2013	75% of population by the end of the license term	N/A
C1	746-752 MHz, 776-782 MHz	EA	40% of population no later than 2/17/2013	75% of population by the end of the license term	N/A
C2	752-757 MHz, 782-787 MHz	REAG	40% of population in each EA no later than 2/17/2013	75% of population in each EA by the end of the license term	N/A
D	758-763 MHz, 788-793 MHz	NWA	75% of population no later than 2/17/2013	95% of population no later than 2/17/2016	99.3% of population by the end of the license term

Partitioning and Disaggregation

- The Commission modified its rules relating to geographic partitioning and spectrum disaggregation for new 700 MHz commercial licenses.
- Partitioning
 - Option 1: Both parties must each certify to the Commission that they will share responsibility for meeting the performance requirements for the entire original geographic license area.
 - Option 2: Both parties must each certify to independently meet the performance requirements for its respective partitioned service area.
- Disaggregation
 - Either party or both working together can satisfy the 4-year and end-of-term construction benchmarks for the entire geographic license area.
- See § 27.15(d)

Power Limits – Upper 700 MHz

Spectrum	Stations	Emission Bandwidth	Population Density (Persons / Square mile)	Maximum Power (ERP) @ 305m HAAT
746-757, 758-763, 776-787, 788-793 MHz	Fixed and Base	1 MHz or less	More than 100	1000 watts
746-757, 758-763, 776-787, 788-793 MHz	Fixed and Base	1 MHz or less	100 or fewer	2000 watts
746-757, 758-763, 776-787, 788-793 MHz	Fixed and Base	Greater than 1 MHz	More than 100	1000 watts/ MHz
746-757, 758-763, 776-787, 788-793 MHz	Fixed and Base	Greater than 1 MHz	100 or fewer	2000 watts/ MHz

- Population Density is considered on a county-by-county basis.
- Control stations and mobile stations transmitting in the 746–757 MHz, 758-763 MHz, 776–787 MHz, and 788-793 MHz bands are limited to 30 watts ERP.
- Portable stations (hand-held devices) transmitting in the 746–757 MHz, 758-763 MHz, 776–787 MHz, and 788-793 MHz bands are limited to 3 watts ERP.
- See § 27.50

Power Limits – Lower 700 MHz

Spectrum	Stations	Emission Bandwidth	Population Density (Persons / Square mile)	Maximum Power (ERP) @ 305m HAAT
698-746 MHz	Fixed and Base	1 MHz or less	More than 100	1000 watts
698-746 MHz	Fixed and Base	1 MHz or less	100 or fewer	2000 watts
698-746 MHz	Fixed and Base	Greater than 1 MHz	More than 100	1000 watts / MHz
698-746 MHz	Fixed and Base	Greater than 1 MHz	100 or fewer	2000 watts / MHz

- A licensee authorized to operate in the 722-728 MHz band (“E” Block), may operate a fixed or base station at an ERP up to a total of 50 kW within its authorized, 6 MHz spectrum block if the licensee complies with the provisions of §27.55(b).
- See § 27.50

Additional Power Limits

- Field Strength Limit: 40 dB μ V/m at the market boundary
 - 698-758 and 775-787 MHz
- Power flux density: Licensees of fixed and base stations transmitting a signal at an ERP greater than standard power levels for its licensed band must comply with a PFD limit of 3000 microwatts/m² on the ground over the area extending to 1km from the base of the antenna mounting structure.
 - Lower 700 MHz band:
 - 698-746 MHz
 - Upper 700 MHz band:
 - 746-757 MHz, 758-763 MHz, 776-787 MHz, and 788-793 MHz
- See § § 27.50 & 27.55

Due Diligence

Applicant Responsibility

- Applicants should perform their individual due diligence before proceeding as they would with any new business venture. Applicants are solely responsible for identifying associated risks and for investigating and evaluating the degree to which such matters may affect their ability to bid on, otherwise acquire, or make use of licenses available in Auctions 73 and 76.

Pending Proceedings

- Applicants should also be aware that certain pending and future applications (including those for modification), petitions for rulemaking, requests for special temporary authority, waiver requests, petitions to deny, petitions for reconsideration, informal oppositions, and applications for review before the commission may relate to particular applicants or incumbent licensees or the licenses available in Auctions 73 and 76. In addition, pending and future judicial proceedings may relate to particular applicants or incumbent licensees, or the licenses available in Auctions 73 and 76. Applicants are responsible for assessing the likelihood of the various possible outcomes, and considering their potential impact on spectrum licenses available in Auctions 73 and 76.

TV/DTV Incumbents

- Please be advised that incumbent broadcast television licensees will continue to operate in this band until the end of the DTV transition, February 17, 2009.
- New licensees must protect incumbent broadcast facilities according to the interference protection criteria listed in § 27.60 of the Commission's Rules.
- These limitations may restrict the ability of such geographic area licensees to use certain portions of the electromagnetic spectrum or provide service to certain areas in their geographic license areas.

International Coordination

- Operation in the 698–763 MHz and 776–793 MHz bands is subject to international agreements between Mexico and Canada.
- Unless otherwise modified by international treaty, licenses must not cause interference to, and must accept harmful interference from, television broadcast operations in Mexico and Canada.

AUCTIONS 73 and 76 INFORMATION WEBSITES

- Auctions and Spectrum Access Division: wireless.fcc.gov/auctions
General Information
Pre-Auction, Auction, and Post-Auction Links
- Wireless Telecommunications Bureau: wireless.fcc.gov
FCC Rules and Regulations
700 MHz Service Rules
- Consolidated Database System (CDBS): www.fcc.gov/mb/video/
Due Diligence Search