

August 2007

## 700 MHz: The Ten Billion Dollar Questions

Almost 1100 licenses with reserve prices totaling more than \$10 billion will be auctioned starting January 16, 2008.

In August the FCC set rules for the auction and use of 62 MHz of spectrum in the 700 MHz band to be reclaimed when television broadcasters transition to digital service in 2009. Almost 1100 licenses with reserve prices totaling more than \$10 billion will be auctioned starting January 16, 2008. Superior propagation makes the 700 MHz band especially attractive because it reduces initial build-out costs and improves service quality inside buildings and in other challenging environments.

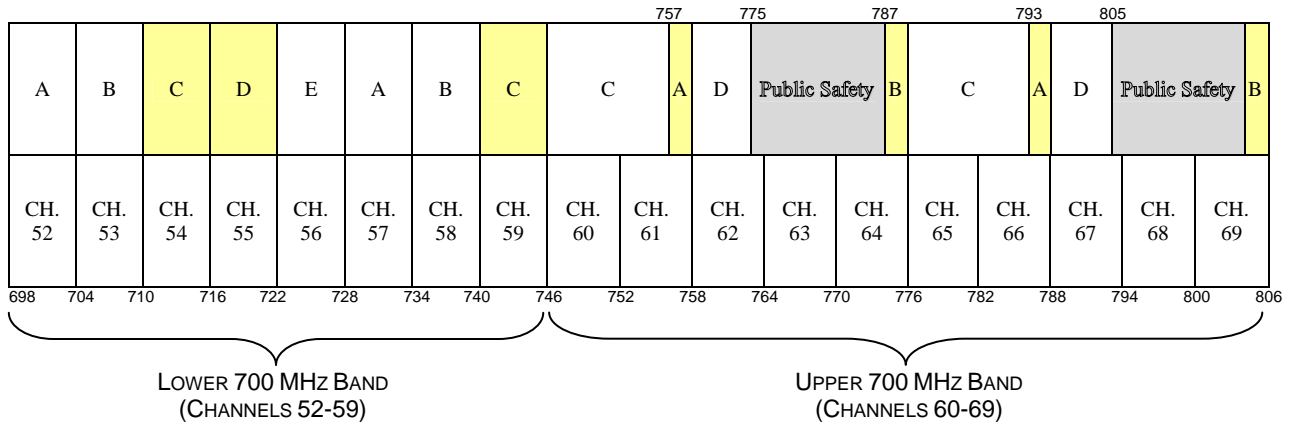
The rules are notable for two reasons. First, they attempt to address the inability of different public safety agencies to communicate with each other wirelessly, especially during emergencies, by creating a complex public/private partnership and allocating 20 MHz of prime spectrum for a hybrid public/private network. Second, this is expected to be the last major wireless spectrum auction for many years and therefore (along with MSS/ATC) one of the last opportunities for a new national wireless player to emerge.

Behind the rules are two big questions that, in spite of ample hype and punditry, can only be answered by the results. Will the US get a new national wireless voice and data competitor or will incumbents steal the show? Will the FCC's ambitious plan for a new public safety network succeed?

Superior propagation makes the 700 MHz band especially attractive ....

The rules reflect intense lobbying. The incumbent national carriers and prospective new national entrants wanted (and received) spectrum blocks covering wide geographic areas to ease consolidation of a national footprint. Smaller carriers wanted (and received) more granularity, with three blocks divided into smaller geographic licenses. Public safety interests wanted (and got) spectrum for a nationwide, interoperable broadband service and incentives for a commercial operator to build the infrastructure. Others, especially Google, wanted very specific requirements that would force wireless networks to unlock the gate to the walled garden (allow use of any device or application) and even allow tenant farmers inside (wholesale access and interconnection). The FCC imposed some "open access" conditions, but probably not enough to affect the outcome of the auction.

**NEW 700 MHz BAND PLAN**



<u>Block</u>	<u>Frequencies</u>	<u>Bandwidth</u>	<u>Pairing</u>	<u>Area Type</u>	<u>Licenses</u>
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.

**What will be auctioned:**

- A 12 MHz “Lower A” block divided into 176 Economic Area (EA) licenses with an aggregate reserve price of \$1.8 billion;
- A 12 MHz “Lower B” block divided into 734 Cellular Market Area (CMAs) licenses with an aggregate reserve price of \$1.37 billion ;
- A 6 MHz (unpaired) “Lower E” block divided into 176 EA licenses with an aggregate reserve price of \$904 million. The Lower E Block will be able to use higher power limits that make this block more attractive for broadcast services like Qualcomm’s MediaFLO.
- A 22 MHz “Upper C” block divided into 12 Regional Economic Area Grouping (REAG) licenses with an aggregate reserve price of \$4.64 billion. The Upper C Block is subject to limited “open access” conditions. Package bidding will be allowed in this block, making it easier a single bidder will win most or all of the licenses.
- A 10 MHz “Upper D” block in a single nationwide license with an aggregate reserve price of \$1.33 billion. The Upper D licensee must be used as part of the 700 MHz Public/Private Partnership entered



## SPECIALISTS IN SATELLITE, MEDIA AND TELECOM INVESTMENT BANKING

---

between the Upper D Block licensee and a new nonprofit entity that will hold a license to the adjacent 10 MHz block (the Public Safety Broadband Licensee).

### Open Access

Through the summer Google and others pressed the FCC to impose aggressive “open access” conditions. With the consent of some incumbents the FCC ultimately adopted watered-down open access requirements. Upper C Block licensees must allow customers, device manufacturers, third-party application developers, and others to use devices and applications of their choice, subject to certain conditions. How much real world effect these conditions will have depends on who wins the licenses and how future FCCs interpret the rules.

...the FCC ultimately adopted watered-down open access requirements.

### Guard Bands

The guard band licenses, which were auctioned years ago but never found a good business plan, have been “re-packed” into two, 1 MHz blocks between the Upper C and Upper D blocks and made subject to the same technical rules. These licenses are now ripe for consolidation with either of the adjacent blocks.

### The Public/Private Partnership

The Upper D Block comes with the obligation to build a seamless national network using the adjacent 10 MHz block, which will be made available to public safety agencies nationwide. The Upper D Block licensee is allowed to use spare capacity in the public safety band, but must give public safety agencies priority access to the D Block spectrum in the event of an emergency.

The FCC's “Public/Private Partnership” would provide a national, interoperable “overlay” broadband network financed by a commercial operator.

On paper this appears to be a good solution to the vexing problem of interoperability for public safety agencies. Thousands of state and local agencies operate independent and often incompatible systems. The FCC's “Public/Private Partnership” would provide a national, interoperable “overlay” broadband network financed by a commercial operator. Existing public safety narrowband services would be undisturbed. Phones with integrated satellite capability would be made available so agencies can have backup to terrestrial systems.

In theory this structure may create an opening for a new entrant to acquire spectrum at a discount. But the details of build-out and operations are left to FCC-supervised negotiations between the public safety broadband licensee and the winner of the Upper D Block auction. Failure to reach agreement with the public safety licensee on technology platform, equipment, sharing terms, build-out schedule, costs, or anything else could result in a substantial default payment and loss of the license. A new entrant without an existing wireless business would be under great



## SPECIALISTS IN SATELLITE, MEDIA AND TELECOM INVESTMENT BANKING

---

financial pressure to conclude negotiations and start construction. Other unusual D Block conditions could complicate efforts to finance construction and operation.

### The \$10 Billion Question: New Competitor?

The wildcards and potential game-changers in this auction are the 22 MHz Upper C Block and the 10 MHz Upper D Block, either of which could actually lead to construction of a new network and launch of a new competitor rather than more capacity for incumbents. The other blocks are divided into small geographic areas that will be all but impossible to aggregate into a national footprint, although new regional players could emerge. It may be difficult for any new entrant (including well-financed contenders like Google and the DBS players) to outbid an incumbent who decides to make an aggressive play for the Upper C Block. And it could be difficult or simply unattractive to finance D Block build-out if negotiations with the public safety licensee don't go smoothly regardless of the size of the presumed MHz/pop discount.

The 700 MHz auction will begin on January 16 and continue for weeks or perhaps months. Whether it builds the spectrum reserves of incumbents or spawns a couple of billion dollar babies, the auction will be among the most closely watched wireless industry developments of 2008.

By John K. Hane  
Pillsbury Winthrop Shaw Pittman LLP

*Mr. Hane is Counsel in the Pillsbury Winthrop Shaw Pittman LLP's Communications practice group. He concentrates on transactions, spectrum licensing and special projects in electronic media distribution and satellite communications. Formerly an attorney with a predecessor to the firm, Mr. Hane spent more than a decade as an in-house lawyer, lobbyist, development executive and entrepreneur before returning to private practice with Pillsbury Winthrop Shaw Pittman LLP in 2006.*

*He can be reached at [john.hane@pillsburylaw.com](mailto:john.hane@pillsburylaw.com)*