

Remarks of Gary M Epstein, Chair – Incentive Auction Task Force  
Media Institute Luncheon  
April 19, 2017

I'm pleased to make my first public post-auction appearance here at the Media Institute. I remember that this was the site of my first speech following the September 2012 release of the Commission's *Incentive Auction Notice of Proposed Rulemaking*. There's a nice symmetry, ending up back here. But this time I am pleased to report that on April 13<sup>th</sup>, 2017, as you *may* have heard, the Commission formally brought to a close the world's first-ever two-sided spectrum auction.

In the bipartisan 2012 Spectrum Act, Congress directed us to design an auction that would “help the Commission meet the Nation’s accelerating spectrum needs” by “facilitating the voluntary return of spectrum usage rights and reorganizing the broadcast television bands [to] recover a portion of [UHF] spectrum ... suitable for providing mobile broadband services.” The Commission stated in the *Auction Notice* that its central objective was to “harness the economics of demand for spectrum in order to allow market forces to determine its highest and best use” while “making all reasonable efforts to preserve ... the coverage area and population served of remaining broadcast licensees.”

When I spoke at the Media Institute in 2012, the Commission had begun the process of figuring out *how* to design and implement an auction that achieved these goals. The Commission then embarked on the difficult task of analyzing and adopting the right mix of policies and auction rules that would attract sufficient interest from the “suppliers” of spectrum – the broadcasters –

and generate enough demand from wireless bidders to reach an equilibrium between supply and demand. Simultaneously, on a parallel track, we had to design, produce, and test and verify new broadcast and wireless interference programs, three new bidding systems, and sophisticated optimization software and systems. And then we actually had to put it all together and run an auction.

Our central problem was to design a successful auction without knowing how much spectrum broadcasters would make available, in which markets, and at what price. Unlike a typical spectrum auction, in which the Commission identifies specific spectrum for mobile use and then holds an auction with a predetermined supply, the supply of spectrum for the incentive auction was purely up to broadcasters. Thus, our charge was to create an auction with the potential for considerable economic benefit, minimal risk to broadcasters, and a mechanism for price discovery.

We also needed an auction design that would ascertain the demand from wireless bidders and ensure that their demand would cover the costs of obtaining the spectrum. This was a key part of Congress' mandate to the Commission. We had to ensure that if the auction couldn't pay the winning broadcasters and broadcaster relocation costs, we needed a mechanism for lowering the cost to reach the supply/demand equilibrium.

Lastly, we were faced with the task of planning a post-auction transition that minimized the overall costs to stations as well as viewer inconvenience, which is simply good public policy.

So today I want to focus on how we solved those problems and how the auction performed relative to those goals.

To refresh your recollection, here is where we wound up: The auction repurposed 84 MHz of low-band spectrum for licensed and unlicensed wireless use, yielded more than \$10 billion to winning broadcasters, raised \$19.8 billion in gross revenues, made available the largest amount of licensed low-band spectrum – 70 MHz – ever auctioned by the Commission and, even after setting aside \$1.75 billion for broadcaster relocations expenses, will provide more than \$7 billion in deficit relief to taxpayers.

Last Thursday, when we formally closed the auction and released the *Closing and Channel Reassignment Public Notice*, we provided detailed information about both the reverse and forward auction and revealed the specifics of the post auction channel reassignment plan.

The reverse auction produced 175 winning broadcast station bidders which allowed us to clear 84 MHz of UHF spectrum for licensed and unlicensed mobile broadband use. Of those 175 winners, 145 stations successfully bid to go “off-air” – in other words, they agreed to relinquish their current spectrum rights without receiving a VHF license as part of the compensation. 133 of these off-air winners – 92% – in their application filings indicated their intent to enter into a channel sharing agreement and continue broadcasting in the markets they serve. While we won’t know for several months whether all of them successfully enter into such agreements, we are encouraged by this initial response.

The remaining 30 winners successfully bid to change bands – unlike the off-air winners, these winning bidders opted to take a smaller cash payout and a VHF band license in exchange for relinquishing their UHF band current license.

When I was at this podium in 2012, I noted that the Commission understood “the valuable service provided by broadcasters who remain on the air and will continue providing the public with diverse, local, free over-the-air television service.” The auction results demonstrate the successful implementation of Congress’ and the Commission’s decision to provide bid options that allowed stations to both participate in the auction and continue to serve their communities. Channel sharing and the VHF option encouraged participation in the auction and allowed the auction to reach the 84 MHz clearing target. The descending clock design of the reverse auction – in which stations could voluntarily accept lower prices or drop out – created a reliable cost discovery mechanism.

There also were many different types of reverse auction winners, including large station groups as well as smaller independent stations from across the country, in both large and small DMAs– and operating with both commercial and non-commercial missions. Non-commercial stations, in fact, were among the top individual and group monetary winners in the auction, providing funds for public broadcasters to further their missions while, for the most part, continuing to broadcast via channel sharing arrangements or band changes. Indeed, two of the top ten and a third of the top 30 individual station winners by revenue were non-commercial stations. Also 41 of the winning stations were Class A stations, who despite having smaller coverage footprints found an opportunity to offer their spectrum rights in the auction at prices they found attractive.

Payouts were similarly diverse: 36 stations won over \$100 million each, including major network-owned stations, PBS stations, and even community college stations. At the other end of the spectrum, 29 winners received seven-figure and six others saw six-figure payouts.

In 2012, I suggested that the auction “presents a significant financial opportunity for broadcasters who choose to participate.” Based on public reports, some winners seem to agree. One of my favorites came last week from the president of KQED in the Bay Area, who called the auction “one of those unusual win-win-win situations. The people of the Bay Area will have a 21st century KQED that adapts to the way they use media today. KQED will be more financially sustainable and stable well into the future, and the FCC will have the spectrum it needs to provide wireless services. Coincidentally, many people now receive their KQED content via wireless devices, so it all makes sense.”

Moving to the forward auction, which resulted in 70 MHz or seven new 10 MHz new wireless licenses in each of 416 individual geographic areas – which we refer to as Partial Economic Areas or PEAs. The \$19.8 billion in gross revenues in this incentive auction is the second-highest total ever for an FCC auction.

The forward auction resulted in 50 different winning bidders from a pool of 62 qualified bidders. Those winners purchased 2,776 of the 2,912 blocks - over 95% of the available blocks were sold.

In case you missed it, T-Mobile was largest winner, both in terms of dollars and blocks won, bidding nearly \$8 billion for more than 1,500 blocks in 414 PEAs. Parker B, an entity affiliated

with Dish Network, was the next largest winner, committing \$6.2 billion for 486 blocks spanning all 416 PEAs. CC Wireless, affiliated with Comcast, won 73 blocks in 72 PEAs, committing \$1.7 billion. Next was Channel 51, affiliated with Columbia Capital, which committed \$1 billion for eight blocks in 5 PEAs. AT&T won 23 blocks in 18 PEAs with a total commitment of \$910 million.

Here are some observations about these results:

First, the forward auction achieved its major goal of using a market based mechanism to repurpose significant spectrum.

Second, we sold 95% of the available supply and generated nearly \$20 billion in revenues, the second highest in FCC auction history.

Third, as a result of successful negotiations with the regulators from our good neighbors to the north and the south, there will be a 600 MHz unified North American band plan across Canada, Mexico, and the U.S. This should allow for interoperability, economies of scale and faster development of the band in future years.

Now that I've talked about what happened in the auction, I want to briefly focus on the important task that lies ahead. I am, of course, referring to the post-auction transition where stations will move to their new channel assignments. We have already been working on post-auction transition issues, including channel reassignment optimization tools, a phased transition

scheduling methodology, and reimbursement procedures, for well over two years. Chairman Pai has made clear his commitment to continue to focus the energies of the Commission on ensuring a smooth and timely transition.

The Public Notice we released on April 13<sup>th</sup> was the starting line. Reassigned stations have until July 12<sup>th</sup> to submit their construction permit applications and reimbursable cost estimates. Stations have had information necessary to begin their preparations since February 6<sup>th</sup>, when we sent confidential letters with their new channel assignments and waived the so-called “quiet period” rule for broadcasters. This gave give them ability to discuss their needs with their suppliers and vendors and coordinate among themselves.

Last week we also identified the stations that will need to change channels and set forth the schedule for them to do so. Contrary to early industry estimates that there would be roughly 1,300 stations impacted by this effort, there are 957 non-winning stations that have been assigned to new channels, in addition to the 30 band-changing winners from the reverse auction. The figure is a product of the final channel assignment optimization plan that the Commission adopted in 2015, which prioritized maximizing the number of stations *not* reassigned to new channels and succeeded in greatly reducing the number of channel moves.

Minimizing viewer disruption is key to the implementation process. As I noted, most of the winning TV stations in the auction have indicated the intent to share channels with other licensees rather than go off air. Such arrangements would assure that no DMA will lose a major network affiliate, PBS affiliate, or Spanish language affiliate as a result of the auction or the

repacking. This doesn't necessary mean that there won't be any pockets of coverage lost by those stations when they broadcast over shared facilities, but the Commission will work with such stations to make adjustments where feasible. This is an important outcome and we will work hard to help make it happen.

Further, channel changes will likely be invisible to cable and satellite customers and, to the extent that a TV viewer obtains over-the-air service through an antenna, the Commission's transition plan assures that they will not have to rescan their TVs to adjust to the new channels more than 2 times over the next 3 years –and that stations will be required to provide notice in advance of such changes.

We also unveiled the scheduled completion dates for each of the 10 transition “phases” as adopted in the Transition Scheduling Plan earlier this year. The first phase is scheduled to end on November 30, 2018, following a 6-week testing period – in other words, the first of the 10 transitions is more than 18 months away. We fully appreciate that the transition will take lots of hard work and cooperation, among broadcast stations, equipment suppliers, other vendors and the new wireless licensees, but we think the plan provides for an orderly and manageable process and is achievable in 39 months and, just as we successfully did in planning and executing the auction, Commission staff is committed to doing what it takes to help assure its success.

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In closing - I'm fortunate enough to sit in an office around the corner from FCC economist and Task Force member Evan Kwerel, who in a 2002 paper first proposed a bold idea for repurposing spectrum to meet the increasing demand for mobile bandwidth – five years before



the iPhone would revolutionize the mobile data economy. Consumer demand for mobile data was already increasing exponentially in 2010, when the National Broadband Plan resurfaced and refined the idea of a broadcast incentive auction, urging Congress and the Commission to use a two-sided auction to bring more low-band spectrum into the pipeline. In 2012 a bipartisan Congress gave the idea life by authorizing the Commission to hold this auction. Now the auction is done.

The Commission's work has spanned five years and had the support of four FCC chairs. One constant has been the dedication of Commission staff – at any given time over 100 of our best and brightest have made this auction their top priority. Now that it's over, I know that the Commission and its staff will continue to bring this same level of rigor to executing the transition plan over the next three years. After serving five years and 26 days (but who's counting) of my two year FCC commitment, I am going to retire for the fourth time and leave the Commission at the end of the month. It has been a privilege to lead this project and to work with this team. The transition effort will be in good hands; I wish them well.

Thank you.