Crafting a Successful Incentive Auction: Stakeholders' Perspectives

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Chairman Rockefeller, Ranking Member Thune, and Members of the Committee, thank you for inviting me to testify regarding the implementation of the first-ever incentive spectrum auction. I am here today on behalf of Competitive Carriers Association ("CCA"), the nation's leading association of competitive wireless carriers. Our association is made up of over 100 competitive carriers ranging from small, rural providers serving fewer than 5,000 customers to regional and national providers serving millions of customers. We also represent over 200 Associate Members – small businesses, vendors and suppliers that provide products and services to carriers of all sizes and employ your constituents. The entire mobile ecosystem is dependent on vibrant competition in the wireless industry at all levels, and access to finite electromagnetic spectrum is critical to supporting this competition.

CCA's diverse membership is bound together by the shared goal of a competitive regulatory framework and the shared concern over the growing market power of the "Twin Bells" – AT&T and Verizon. Through a steady stream of acquisitions of both competitive carriers and spectrum, these two dominant carriers have turned what once was a robustly competitive wireless marketplace into an industry marching towards duopoly. I know several members of this Committee, as well as the Federal Communications Commission ("FCC" or "Commission"), the Department of Justice ("DOJ"), and Small Business Administration have voiced similar concerns about the increasingly consolidated nature of the industry.

The incentive auction presents a unique opportunity to promote competition in our consolidating industry. Carriers of all sizes require increasing access to limited spectrum resources to provide the services consumers demand. As the DOJ has noted, "spectrum is a scarce resource and a key input for mobile wireless services." Allowing all carriers, and particularly competitive carriers, to access adequate spectrum resources promotes competition. With an appropriate framework for access to spectrum and other critical inputs, competitors are prepared to invest, innovate, and create jobs to deliver significant benefits to consumers and the economy. Like DOJ Antitrust Division Assistant

Attorney General William Baer recently stated, "When you have feisty rivals whose survival depends on innovating and differentiating, they can gain market share and loosen the oligopoly."

Amidst consolidation in our industry, the incentive auction represents the only near-term opportunity for competitive access to critical low-band frequencies. CCA commends Congress, and particularly the leadership shown by this Committee, for authorizing the FCC to conduct a voluntary incentive auction to reallocate licensed spectrum for mobile broadband use through the Middle Class Tax Relief and Job Creation Act of 2012 ("Spectrum Act"). We are also pleased with the Commission's efforts, to date, to implement the Spectrum Act with a watchful focus on the importance of competition. The upcoming incentive auction is unique in many ways, including authorizing the FCC to conduct only one reverse auction and repacking of broadcast television spectrum. With one shot to complete this effort, it is vital that the auction is structured to provide maximum benefits to competition and consumers.

A successful incentive auction must attract sellers and buyers alike, maximizing participation in both the reverse and forward auctions. In the forward auction, the FCC must provide all carriers with a meaningful opportunity to bid for needed spectrum. No one or two carriers should be able to aggregate all the reclaimed spectrum and effectively exclude rivals and potential rivals from access to low-band frequencies. Consistent with the Spectrum Act, all carriers, including the two largest carriers, must have an opportunity to bid on spectrum where needed; however, no one should be allowed to foreclose competitors' access. In addition to reasonable aggregation limits, spectrum must be made available in sufficiently small geographic areas to allow participation by rural, mid-size, and regional carriers, as well as national providers. The 600 MHz spectrum also must be interoperable, so that the largest carriers cannot use their massive market power to prevent competitors from gaining access to the necessary equipment to provide service using spectrum in the reallocated band. Finally, policymakers should reject bidding packages and blind bidding that may prevent competitive carriers from accessing spectrum even

if these other conditions are met, and include bidding credits as appropriate. Beyond creating a successful forward auction, appropriate incentives, outreach, and regulatory certainty are needed for broadcasters to fully consider their options to maximize participation. If broadcasters do not show up to participate in the reverse auction, there will be no forward auction.

These goals and policies will not only promote competition and benefit consumers, but will raise significant revenue for using taxpayer-owned spectrum resources. Proceeds from the incentive auction to fund the First Responder Network Authority ("FirstNet"), a nationwide interoperable broadband network for public safety users, must come from revenue generated in auctions of spectrum identified in the Spectrum Act. While the broadcasters' reclaimed 600 MHz spectrum is included, the incentive auction is one of several funding streams established through the Spectrum Act that will fund the creation and deployment of FirstNet. Revenue will also support deficit reduction, 911 services, and research and development. Fortunately the goals of promoting competition and raising revenue are not mutually exclusive – auctions with the greatest number of bidders are typically the ones that generate the most revenue.

As a result of Congress's direction to the FCC to conduct competitive spectrum auctions, competition was introduced, and many of CCA's members entered the wireless market. After a decade of consolidation, a successful incentive auction is vital to promote sustainable competition for the digital age.

Benefits for Competition

Not all spectrum is created equal, which is why the incentive auction of low-band spectrum is critical to restoring competition in the wireless market. With its excellent propagation characteristics, low band spectrum (or spectrum below 1 GHz) travels greater distances and penetrates into buildings.

As AT&T CEO Randall Stephenson stated last year, low-band spectrum "propagates like a bandit." This

makes low-band spectrum important for expanding coverage in all areas, urban and rural. Carriers must be able to provide services responsive to consumer demands, or they do not have a competitive offering. It is more difficult and costly for a competitor to provide service absent low-band spectrum. Low-band spectrum has superior in-building penetration and its broader coverage results in significant deployment cost savings by requiring fewer towers to serve a larger area.

It is important to note that AT&T and Verizon hold the majority of sub-1 GHz spectrum, and that much of this spectrum was given to the two largest companies for use before the FCC had spectrum auction authority. Early commercials for Verizon's 700 MHz LTE touted its capabilities for "the most consistent speeds indoors or out and obviously astonishing throughput," and AT&T claimed that T-Mobile "customers [would] enjoy improved coverage, including superior in-building and in-home service, because of the denser grid and access to 850 MHz spectrum" as a benefit to its since abandoned takeover attempt of T-Mobile.

The incentive auction is the only near-term opportunity for increased access to low-band spectrum through FCC auctions. While existing mobile spectrum licenses may be bought on the secondary market, this process is largely controlled by the two largest carriers. For example, in 2012, AT&T and Verizon accounted for nearly 55% of all secondary market transactions, and 70% of all acquisitions involving spectrum below 1 GHz. For many smaller carriers, the secondary market is not working. This only serves to underscore the importance of gaining access to critical low-frequency spectrum resources through the upcoming incentive auction.

The incentive auction also has significant benefits for rural America. Some have claimed that there are no benefits to rural America in the incentive auction, and that it is an urban-focused or "New York" auction. This is not the case. With its superior propagation characteristics, the 600 MHz spectrum that will be made available through the incentive auction is exactly what is needed to blanket rural America with next generation mobile broadband coverage. On that note, I would also like to dispel the

myth that rural Americans, and the carriers that serve them, are not on the cutting-edge of mobile broadband technology and use. In fact, a recently CCA-commissioned study found that 80% of rural Americans that plan to purchase a new device within the next three months, plan to purchase smartphones. Specifically, almost 70% of individuals surveyed that earn \$25,000 a year or less plan to purchase a smartphone, and 34% of rural smartphone owners use wireless exclusively to access the Internet. The benefits of mobile broadband use for mHealth, education, public safety, and economic innovations are magnified in rural areas. Yet close to 40% of rural wireless consumers feel they have less choice when it comes to devices and service plans when compared to their city-dwelling neighbors. Increased access to low-band spectrum for competitive carriers will help bridge this gap, yielding significant benefits for rural America.

Current 600 MHz operations in rural areas also provide auction efficiencies through inclusion in the incentive auction. There are more "white spaces" in the current broadcast band in rural parts of the country. Accordingly, fewer existing broadcasters will need to relinquish spectrum in rural areas, and when remaining broadcasters are repacked following the auction, it will be easier to reach clearing thresholds for the newly reallocated band plan. This means that through the reverse auction, the FCC will need to "buy back" fewer broadcast licenses, while still compensating rural broadcasters that elect to participate, in order to make the same or greater amounts of spectrum available in the forward auction for mobile broadband use. The funds generated from spectrum in rural America will contribute to higher revenue amounts with lower incentive and relocation costs, helping the FCC reach higher clearing thresholds in urban areas as well. While the benefits of increased mobile broadband service in rural America alone are significant, rural carriers also play an important function in the success of the incentive auction overall. It is important, however, that the forward auction is structured so that all competitors have a meaningful opportunity to bid for, win, and provide service using this spectrum.

Priorities for the Forward Auction

Congress has provided the FCC with the necessary tools to structure and conduct a forward auction that incents the maximum number of participants and supports competition while meeting its obligation to promote the dissemination of licenses among a wide variety of applicants, including small businesses and rural operators. Specifically, the Spectrum Act reaffirms FCC authority to "adopt and enforce rules of general applicability, including rules concerning spectrum aggregation that promote competition." The FCC should utilize these tools to structure a competitive auction that allows all carriers to bid on licenses they need and provide services to meet consumers' ever increasing demands for mobile broadband access. Specifically, the FCC must prevent spectrum aggregation, right-size spectrum licenses, require interoperability and adopt procompetitive auction procedures.

- Prevent Spectrum Aggregation

An auction that cements the two largest carriers' dominance of low-band spectrum holdings would be detrimental to wireless competition. The FCC can easily prevent this by adopting clear, ex ante aggregation limits. The auction's structure has an enormous impact on whether and how competitive carriers can participate. As Chairman Pryor noted about the 700 MHz auction in 2008, "[h]istory will show that the way the FCC structured the auction basically helped the two big wireless companies to the detriment of competition in this country." Let's not make the same mistake. It is vital that the FCC structure the forward auction in a manner that *supports* competition nationwide.

No one, including CCA and its members, has advocated for excluding AT&T or Verizon from participating in the forward auction. As stated above, consistent with the Spectrum Act, all carriers should have the opportunity to participate. Policymakers must ensure, however, that the largest two carriers cannot leverage their tremendous resources to aggregate all reclaimed spectrum in the auction and foreclose competitors from access to the 600 MHz band while they stock their spectrum

warehouses. As Chairman Wheeler recently noted, "A key goal of our spectrum allocation efforts is ensuring that multiple carriers have access to airwaves needed to operate their networks." Accordingly, the FCC must set clear *ex ante* rules that signal to competitors that they will have a realistic opportunity to win spectrum if they participate in the auction, and that the largest two will not be allowed to dominate and foreclose their rivals. The FCC has in the past successfully used auction rules to foster competition while exceeding revenue projections, and should again seek to accomplish both goals through pro-competitive measures.

Some have claimed that smaller competitors seek generally applicable aggregation rules to tilt the playing field in their favor. But it is the opposite: having no aggregation limits in the auction would dramatically tip the scales in favor of the largest incumbents that already control an enormous portfolio of low-band spectrum. Well-crafted auction rules are necessary, not to favor competitors, but to ensure that there can be a dynamic market for competition.

Beyond the incentive auction, the FCC should take steps to prevent excessive spectrum aggregation generally, and I urge the FCC to complete its pending Mobile Spectrum Holdings proceeding and update the broken spectrum screen. More specifically, since the incentive auction is the only near-term opportunity to gain access to low-band spectrum, the importance of effective aggregation rules that promote competition are underscored. Although the incentive auction is the first of its kind in many respects, policymakers should not rely on theoretical analysis alone to understand the impact of spectrum aggregation restraints in low-band spectrum auctions. The experiences of many international regulatory bodies have not only shown the rural and in-building coverage benefits and cost savings of low-band spectrum, but also have demonstrated that appropriate, up-front aggregation limits promote further competition in auctions and in the market and yield higher revenues.

Right-Sized Spectrum Licenses

Spectrum licenses must be made available in geographic sizes that allow competitors of all sizes to bid for, access and use new licenses won at auction. This is a threshold issue that must be resolved; otherwise competitive carriers will face a barrier to participation. Right-sized spectrum licenses permit smaller carriers to bid for spectrum that matches their current service footprint, while allowing larger carriers to piece together the licenses they need, up to nationwide coverage. This promotes increased carrier participation in the forward auction.

Cellular Market Areas ("CMAs") are the best geographic license size to promote competition, to raise revenue and to protect the public interest. As a recently CCA-commissioned study demonstrated, CMAs would allow smaller carriers to bid on smaller spectrum licenses without being forced to bid for spectrum they cannot efficiently use. Without smaller geographic license sizes, many smaller carriers will be foreclosed from bidding altogether, putting auction participation and ultimately auction revenues unnecessarily at risk. These smaller license sizes also increase opportunities for market variation in areas where lower amounts of spectrum is reclaimed, and helps mitigate problems regarding coordination along our borders. CMAs also support a more dynamic secondary market for years after the auction has closed. By making more spectrum available for mobile broadband use by reducing the number of licenses with potential encumbrances, CMAs maximize available spectrum and likely increase overall auction revenues. Any auction that does not include sufficiently small license sizes to allow for all carriers to have a meaningful opportunity to bid amounts to regulatory exclusion of smaller carriers. In previous auctions, smaller licenses sizes have raised greater revenue per MHz/POP. For example, in Auction 73, the lower 700 MHz B Block, licensed using CMAs, generated a price twice as high as the larger EA sized lower A Block.

Price of lower A and B Blocks and upper C Block in the 700 MHz auction (March 2008)

Block	Α	В	С
Bandwidth	12 MHz	12 MHz	22 MHz
Туре	paired	paired	paired
Partition	176	734	12
Price (\$/MHz-pop)	\$1.16	\$2.68	\$0.76

Because the FCC seems focused on using larger Economic Area ("EA") size licenses, CCA is also currently evaluating the potential for a middle-ground compromise. While we are still vetting the possibilities and socializing ideas among CCA's members, subdividing EAs into Partial Economic Areas ("PEAs"), may preserve some of the benefits of using CMAs. Along with appropriate spectrum aggregation limits, right-sized geographic licenses, whether CMAs or PEAs, will help to maximize the spectrum available and encourage auction participation by carriers of all sizes.

- Require Interoperability

While interoperability was once a shared need, continuing consolidation now requires an up-front requirement that devices utilizing the same technology and operating within the same spectrum band interoperate across all networks using the same technology and band. Interoperability helps ensure nationwide service coverage and preserves consumers' choice of service provider, and the FCC has historically promoted interoperability of other service bands. CCA commends Chairwoman Clyburn and her staff, the FCC's Wireless Bureau, and Members of Congress, including several members of this Committee, for their work to restore interoperability to the Lower 700 MHz band. Competitive carriers bid aggressively in Auction 73, including nearly \$2 billion in winning bids from CCA members, under the assumption that the spectrum, like all spectrum before, would be interoperable. It was not until after Auction 73 closed that AT&T created a boutique band class, stranding the Lower A Block without access to devices. After four years, with the help of Chairwoman Clyburn, the industry finally reached an agreement to restore interoperability. During those four years, consumers, especially in rural America,

were not able to realize the benefits of expanded mobile broadband service. Precious resources were expended as capital was stranded on spectrum that could not yet be used and expansive testing and investment focused on restoring interoperability instead of deploying coverage.

I am pleased to report that these carriers are now moving forward to deploy services, and that many competitive carriers are refocused on participating in upcoming spectrum auctions. But it is important that this mistake is not repeated in the incentive auction. An up-front requirement for interoperability in the 600 MHz band is critical to provide the certainty needed for competitive carriers to participate in the incentive auction. Interoperability is necessary to support technological compatibility for consumers to continue to receive service when roaming outside of their carrier's network coverage, a critical element for less-than-national carriers to provide access to the nationwide services consumers demand. A clear rule stating that interoperability will be required is necessary for competitors to raise capital, develop business plans, and invest to provide new services.

Package Bidding and Blind Bidding

As already noted, spectrum aggregation limits, right-sized licenses, and interoperability are critical to the incentive auction's success. But the benefits of an auction that includes these elements may be lost if other practices, such as package or combinatorial bidding and blind bidding, are allowed to undo these competitive safeguards. CCA understands the largest carriers' desires to bid for a large spectrum footprint at once; however, these packages will not change a carrier's incentives to bid on particular markets and may curtail or eliminate participation by smaller carriers and may reduce the revenues generated in the auction. Large packages disproportionately burden rural and regional carriers, and may undermine the benefits of auctioning spectrum using right-sized geographic units.

Additionally, policymakers should avoid blind bidding practices that distort competition in auctions, and support pro-competitive bidding credits to foster a diverse group of bidders. Blind bidding adds

unnecessary complexity to the process of valuing spectrum, and may impact the availability of devices and roaming partners. Accordingly, the use of blind bidding has disproportionate adverse effects on smaller carriers. Conversely, the appropriate use of bidding credits promotes participation by small businesses.

Funding Targets and Public Safety Benefits

While previous spectrum auctions have returned significant benefits to taxpayers to the tune of billions of dollars to the Treasury, the incentive auction is again unique in providing particular targets for funds raised through this auction. Among these targets, the Spectrum Act dedicates funding for creating and deploying FirstNet, a nationwide interoperable mobile broadband network for public safety.

Congress wisely provided several funding streams for this important goal, including not only the incentive auction but also several other auctions that will likely be completed and raise billions of dollars before the incentive auction begins. These auctions include the H block, which will be auctioned in January, and the yet-to-be-scheduled AWS-3 auction. CCA commends Congress, the FCC, National Telecommunications and Information Administration and the Department of Defense for recent developments to reallocate the 1755-1780 MHz band to be paired with the 2155-2180 MHz band for auction. This pairing will maximize the use and potential revenue generated from its upcoming auction, and provides another important opportunity for competitive carriers to access needed spectrum in a globally harmonized LTE equipment ecosystem. Based on various estimates, it is likely that these auctions will fully fund the Spectrum Act's \$7 billion obligation to FirstNet before conducting the incentive auction.

FirstNet's success is not only dependent on obtaining this funding, but also on public-private partnerships with the wireless industry to make nationwide mobile broadband coverage a reality. FirstNet benefits from competition among commercial wireless carriers through having additional

potential partners for deployment and roaming, as well as having a greater number of potential buyers of excess capacity on FirstNet on a secondary basis. Partner carriers, particularly in rural areas, will require spectrum below 1 GHz to efficiently cover large land masses with low populations. If these carriers cannot gain access to needed spectrum through the incentive auction, either due to aggregation efforts of the largest two carriers or because they were foreclosed from participating due to the size of licenses offered, they will not be able to form partnerships with FirstNet for the benefit of the new nationwide interoperable broadband public safety network.

Broadcaster Incentives

The entire incentive auction process hinges on sufficient participation by broadcasters, and policymakers must ensure that broadcasters are equipped to fully evaluate their options in the incentive auction. This includes not only education and outreach to all potential reverse auction participants, but also the regulatory certainty to evaluate future valuations of broadcast business plans. Pending rulemakings must be completed where possible, as they may have significant impact on how broadcasters approach their decision to relinquish or share some or all of their existing spectrum.

Accordingly, the FCC must be open and transparent regarding post-auction broadcaster flexibility, both in terms of repacking and the regulatory regime.

Other Efforts to Promote Competition

I would be remiss if I did not acknowledge other efforts led by members of this Committee to promote competition in the wireless industry. I commend Senators Klobuchar and Fischer for their work to ensure that unused spectrum is available for use by smaller and rural carriers. While this does not replace the need for access to spectrum through auctions, their recently introduced legislation could help smaller carriers access spectrum on the secondary market. Additionally, I support Senator Ayotte's

focus on Universal Service Fund issues, and look forward to working with her on making sure that support is competitively neutral. CCA appreciates the opportunity to work with Senators on these and several other issues before the Committee.

Conclusion

The FCC faces many challenges in pioneering the first incentive auction, but also has the potential to reinvigorate mobile broadband competition while generating significant revenue for use of a finite, taxpayer-owned resource. I support Chairman Wheeler's announcement and milestones to conduct the auction in a way that ensures we get it right. I urge policymakers to view a successful auction as one that not only generates revenue, but also reallocates the maximum amount of spectrum to meet our nation's growing mobile broadband demands, ensures that carriers of all sizes have a meaningful opportunity to bid, and bolsters competition by providing more carriers access to critical sub 1 GHz spectrum. In turn, a competitive mobile broadband industry will yield untold dividends to consumers for years to come. The FCC should use the tools provided by Congress to conduct an auction that delivers not only revenue but also competition to allow continued growth and innovation in the wireless industry under a light touch regulatory regime.

CCA appreciates the Committee's oversight and focus on this important issue, and I thank you for the opportunity to testify before you today. I welcome any questions.