

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Auction of Priority Access Licenses for the 3550-3650 MHz Band)	AU Docket No. 19-244
)	
Comment Sought on Competitive Bidding Procedures for Auction 105)	
)	
Bidding in Auction 105 Scheduled to Begin June 25, 2020)	

COMMENTS OF T-MOBILE USA, INC.

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T-Mobile USA, Inc. (“T-Mobile”)^{1/} submits these comments in response to the *Public Notice* in the above-referenced proceeding that seeks comment on the procedures to be used for the auction of Priority Access Licenses (“PALs”) in the 3550-3650 MHz band (“Auction 105”).^{2/}

I. INTRODUCTION AND SUMMARY

T-Mobile appreciates the Commission’s efforts to make the 3550-3650 MHz band available for commercial wireless use and looks forward to an auction of PALs in June 2020. The auction will be the culmination of years of effort by the Commission and industry to develop sensible rules that will better foster Fifth Generation (“5G”) wireless innovation and investment in the spectrum. While the Commission should proceed to auction this band and unleash its

^{1/} T-Mobile USA, Inc. is a wholly-owned subsidiary of T-Mobile US, Inc., a publicly traded company.

^{2/} See *Auction of Priority Access Licenses for the 3550-3650 MHz Band; Comment Sought on Competitive Bidding Procedures for Auction 105; Bidding in Auction 105 Scheduled to Begin June 25, 2020*, Public Notice, FCC 19-96 (rel. Sept. 27, 2019) (“*Public Notice*”).

potential, it must be careful not to disturb the careful balancing the Commission’s *2018 3.5 GHz Order* reached with respect to the geographic areas through which PALs will be authorized.^{3/}

In particular, the Commission must continue to recognize, as it did in the *2018 3.5 GHz Order*, that issuing licenses in densely populated, small geographic areas would create border interference issues and impose significant burdens on the Spectrum Access System (“SAS”). That is why, among other reasons, the *2018 3.5 GHz Order* stated that the Commission would seek comment on permitting PAL applicants to engage in package bidding – in this case, bidding at a Cellular Market Area (“CMA”) level – allowing bidders to acquire larger footprints, especially in urban areas.^{4/}

Unfortunately, while the *Public Notice* proposes to allow bidding on a CMA-level basis, the Commission would also allow bidding on a county-level basis in the same geographic areas. The Commission should abandon this proposal and permit bidding only on a CMA-level basis for top multiple-county CMAs. Allowing bidding on both a county-level and CMA-level basis in the same geographic areas would (1) perpetuate the precise interference protection problems the Commission was attempting to solve in allowing licensing throughout larger geographic areas; (2) create the need for complex auction processes such as the proposed exception to the “no excess supply” rule, the use of an “activity upper limit,” and the potential need to set prices based on equalizing aggregate demand across the counties in a CMA; and (3) potentially result in unsold licenses, particularly harming rural consumers. Similarly, requests to rely solely on county-level bidding should also be dismissed.

^{3/} See *Promoting Investment in the 3550-3700 MHz Band*, Report and Order, 33 FCC Rcd 10598 (2018) (“*2018 3.5 GHz Order*”).

^{4/} See *id.* ¶ 40.

Finally, in order to provide clarity to bidders, the Commission should reject NTIA's assertion that the Commission must establish a reserve price based on "sharing costs" incurred by Federal entities in the 3550-3650 MHz band.^{5/} NTIA's assertion is inconsistent with Commission practice and Congressional intent and would reduce the future effectiveness of Federal and non-Federal spectrum sharing. T-Mobile agrees with the Commission that there are no circumstances associated with Auction 105 that suggest a separate aggregate reserve price should be used in the auction.

II. THE COMMISSION SHOULD PERMIT BIDDING ONLY ON A CMA-LEVEL BASIS IN THE TOP CMAS WITH MORE THAN ONE COUNTY

A. Allowing CMA-Level and County-Level Bidding in the Same CMA Will Increase Interference Risks, Make SAS Spectrum Management Problematic, and Threaten the Success of the Auction

The Commission proposes that CMA-level bidding be available for the 172 CMAs that are considered Metropolitan Statistical Areas ("MSAs") and that include more than one county.^{6/} If a bidder elects CMA-level bidding for a CMA, it would forego county-level bidding for the individual counties in that CMA.^{7/} A bidder that does not elect CMA-level bidding for a particular CMA would be permitted to bid for any or all of the counties in the CMA individually.^{8/}

T-Mobile appreciates the Commission's proposal to permit CMA-level bidding for certain CMAs, which is consistent with its recognition in the *2018 3.5 GHz Order* of the need to

^{5/} See Letter from Charles Cooper, Associate Administrator, Office of Spectrum Management, NTIA, to Dr. Donald Stockdale, Jr., Chief, Wireless Telecommunications Bureau, FCC, *et al.*, AU Docket No. 19-244 (filed Sept. 25, 2019) ("NTIA Letter").

^{6/} See *Public Notice* ¶ 30.

^{7/} See *id.* ¶ 29.

^{8/} See *id.* ¶ 30.

provide greater opportunities to PAL applicants interested in serving larger areas and the interference challenges created by having multiple licensees in smaller, densely populated areas.^{9/} CMA-level bidding would not only help mitigate interference concerns created by the issuance of multiple PALs in small, densely populated areas, but it would also enable wireless service providers to create more appropriately-sized service areas to fit their customers' needs,^{10/} encouraging more intensive and efficient use of the spectrum.

However, T-Mobile strongly urges the Commission to permit *only* CMA-level bidding for the 172 CMAs that are considered MSAs and that include more than one county and to prohibit both CMA-level and county-level bidding in those areas. *First*, allowing county-level bidding and CMA-level bidding in the same area would result in many of the same technical challenges that the Commission's proposed adoption of CMA-level bidding was intended to resolve in the first place. For example, if CMA-level bidding and county-level bidding are both permitted in the same area, a CMA-level bidder could win a block in all of the counties in the CMA, and separate county-level bidders could win adjacent channels in those same counties. The greater the likelihood of multiple licensees holding adjacent channels in the counties in the CMA, the greater the coordination and interference risk. As the Commission has recognized, "licensees may have a legitimate need to coordinate with holders of both geographically and spectrally adjacent licenses in order to maximize the utility of the band and facilitate efficient network planning."^{11/} Such coordination would be exponentially more difficult to the extent

^{9/} See 2018 3.5 GHz Order ¶¶ 22-25, 40.

^{10/} See Letter from Steve B. Sharkey, Vice President, Government Affairs, Technology and Engineering Policy, T-Mobile, to Ms. Marlene H. Dortch, Secretary, FCC, GN Docket No. 17-258, *et al.*, at 3 (filed Oct. 16, 2018) ("T-Mobile Oct. 2018 *Ex Parte* Letter").

^{11/} See 2018 3.5 GHz Order ¶ 25.

there are multiple county-level winning bidders and CMA-level winning bidders in the same area.

In addition, as T-Mobile has explained,^{12/} because there are not separate uplink and downlink bands, interference can occur when uplink transmissions overlap with downlink transmissions. Time Division Duplex-Long Term Evolution (“TDD-LTE”) technologies, which are expected to be used in the band, require coordination among co-channel and adjacent-channel systems at geographic area borders to manage and contain interference, making synchronization of the adjacent TDD-LTE networks necessary to prevent cross-cell interference. For the same reasons noted above, this coordination would be made much more difficult by allowing a mix of CMA-level bidding and county-level bidding in the same area.

As a result of the interference issues that would occur from multiple licensees holding county-based licenses in the same CMA, the SAS’s job of assigning channels would also become much more difficult. While the Commission will license PALs on a county basis regardless of whether demand for the counties in a specific CMA is expressed through CMA-level or county-level bidding,^{13/} winners of CMA-level bids are more likely to hold the same spectrum in a broader area. That is because the Commission has directed SASs to “assign geographically contiguous PALs held by the same Priority Access Licensee to the same channels in each geographic area” and “assign multiple channels held by the same Priority Access Licensee to

^{12/} See T-Mobile Oct. 2018 *Ex Parte* Letter at 4; Letter from Steve B. Sharkey, Vice President, Government Affairs, Technology and Engineering Policy, and John Hunter, Senior Director, Government Affairs, Technology and Engineering Policy, T-Mobile, to Ms. Marlene H. Dortch, Secretary, FCC, GN Docket No. 17-258, *et al.*, at 3 (filed Apr. 25, 2018).

^{13/} See *Public Notice* ¶ 29 n.64.

contiguous frequencies within the same License Area,” to the extent feasible.^{14/} Thus, the more bidders win CMA-level bids, the easier it will be for a SAS to coordinate co-channel use.

Second, allowing county-level bidding and CMA-level bidding in the same area could harm the auction process and leave counties unsold because of the Commission’s proposed exception to the “no excess supply” rule.^{15/} Under this exception, the Commission would allow a reduction of one block across all counties of a CMA-level bid if there is excess demand in at least one county in that CMA, even if that reduction creates excess supply in some counties of the CMA.^{16/} Without this exception, the expression of demand at a particular price level would be consistent across all counties in a CMA.^{17/} T-Mobile appreciates that the auction rules must allow bidders to reduce demand when prices increase and demand exceeds supply and that the exception to the “no excess supply” rule may partially accommodate that need. However, the exception also creates a major risk for the outcome of the auction. In particular, if some bidders elect to bid on a CMA-level basis and others elect to bid on a county-level basis, it is possible that as a CMA-level bidder reduces its demand in a CMA, pursuant to the exception to the “no excess supply” rule, licenses in some counties may remain unsold. The excess supply of licenses in those counties may not be “claimed” by any other bidder because other bidders may not have the eligibility to bid on those licenses after they become available or because prices have become high enough that no eligible bidder would want to buy those licenses at these prices.

Licenses in more densely populated counties would be at the greatest risk of remaining unsold because of their higher bidding eligibility requirements, particularly if the Commission,

^{14/} See *Public Notice* ¶ 3; *2018 3.5 GHz Order* ¶¶ 80-82.

^{15/} See *Public Notice* ¶ 69.

^{16/} See *id.*

^{17/} See *id.* ¶ 29.

as discussed in further detail below, also maintains a high activity requirement. For example, in the Los Angeles CMA, a CMA-level bidder could reduce its demand in the counties of Los Angeles (covering 9.8 million pops), Orange (covering 3 million pops), and Riverside (covering 2.2 million pops) – potentially creating excess supply in each of those counties – simply because the relatively smaller San Bernardino county (covering 2 million pops) had excess demand. Because those counties have relatively higher bidding eligibility requirements (covering a total of 15 million pops), other bidders would not likely have sufficient eligibility to bid on those counties (or the CMA), leaving the more densely populated counties unsold.

While the risk of having unsold licenses is greatest in highly populated counties, there would also be a substantial risk that the exception to the “no excess supply” rule would result in unsold licenses in rural areas, harming consumers in unserved and underserved areas. If bidders take advantage of the exception to the “no excess supply” rule to reduce their demand in rural counties as the aggregate price for the CMA rises, licenses in those counties may remain unsold, regardless of other bidders’ eligibility, because bidders may be less interested in serving those areas and/or the price has become too high for those areas. Because the Commission’s rules require winning bidders to build out on a county-level basis,^{18/} the fewer licenses sold and constructed in rural counties, the more communities will remain unserved and underserved. On the other hand, winning bidders of CMA-level bids would be required to build out *all* of the county-based licenses in the CMA, thereby ensuring that *all* consumers in the CMA receive service.

Providing an exception to the “no excess supply” rule has also prompted the Commission to propose the use of an “activity upper limit” and requires it to address the need to set prices to

^{18/} See 47 C.F.R. § 96.25.

equalize aggregate demand across counties in a CMA.^{19/} Yet, the Commission has successfully conducted multiple clock auctions and is about to initiate another, all without these additional complexities. The Commission can eliminate both the technical interference issues and the negative effects of the exception to the “no excess supply” rule by permitting only CMA-level bidding in the most populated areas. T-Mobile recognizes that permitting only county-level bidding would also avoid the need for, and associated problems with, the exception to the “no excess supply” rule. However, allowing only county-level bidding would not ameliorate the technical challenges – in fact, it would exacerbate the interference issues even more than allowing a mix of county-level and CMA-level bidding. Accordingly, to eliminate the need for an exception to the “no excess supply” rule, the additional auction complexities it creates, *and* the inefficiencies of PALs authorized over small geographic areas, the Commission should permit only CMA-level bidding for the 172 CMAs that are considered MSAs and that include more than one county.

B. Proposals Suggesting that the Commission Should Utilize Only County-Level Bidding are Untimely and Should be Rejected

Prior to the adoption of the *Public Notice*, some parties urged the Commission to seek comment on whether it should limit the extent of CMA-level bidding. For instance, Charter Communications, Inc. (“Charter”) asked the Commission to seek comment on whether the Commission should “limit the extent of CMA-level bidding, while still providing bidding flexibility for those applicants interested in serving larger areas, by, for instance, excluding larger CMAs; excluding the largest counties in the top 30-50 largest Metropolitan Statistical Areas; limiting to less than four the number of Priority Access Licenses in a given county that can be

^{19/} See *Public Notice* ¶¶ 45, 59.

included in a winning CMA-level bid; or by other means.”^{20/} NCTA – The Internet & Television Association (“NCTA”) recently asserted that there are several negative consequences associated with CMA-level bidding and urged the Commission “to adopt a county-based clock auction without CMA bidding.”^{21/} And the Open Technology Institute at New America (“OTI”) has claimed that CMA-level bidding would drive the price up in rural and other less densely populated counties and appears to be a “duplicitous reversal” of the Commission’s *2018 3.5 GHz Order*.^{22/}

The Commission should reject any proposal suggesting that it should favor county-level bidding in populated areas. The Commission has already recognized the need to facilitate bidding on larger geographic areas and suggested that it would allow a form of package bidding to provide that flexibility.^{23/} The proposals and arguments of Charter, NCTA, and OTI are contrary to the spirit, if not the wording of the *2018 3.5 GHz Order*, essentially constituting untimely objections to the *2018 3.5 GHz Order*. And even if they were not untimely objections, some of their assertions actually favor allowing only CMA-level bidding in the top markets.^{24/}

^{20/} Letter from Elizabeth Andrion, Senior Vice President, Regulatory Affairs, Charter, to Ms. Marlene H. Dortch, Secretary, FCC, AU Docket No. 19-244, *et al.*, at 1-2 (filed Sept. 20, 2019).

^{21/} Letter from Danielle Piñeres, Vice President & Associate General Counsel, NCTA, to Ms. Marlene H. Dortch, Secretary, FCC, AU Docket No. 19-244, at 2 (filed Oct. 15, 2019) (“NCTA *Ex Parte* Letter”).

^{22/} See Letter from Michael Calabrese, Director, Wireless Future Project, Open Technology Institute/New America, to Ms. Marlene H. Dortch, Secretary, FCC, AU Docket No. 19-244 (filed Oct. 17, 2019).

^{23/} See *2018 3.5 GHz Order* ¶¶ 9, 19, 23.

^{24/} For example, NCTA’s concerns that CMA-level bidding would create incentives for county price steering and inefficient outcomes, result in many counties unsold, and force bidders to pay more for a package of licenses than their submitted bids could be ameliorated if, as T-Mobile suggests, only CMA-level bidding is permitted. See NCTA *Ex Parte* Letter at Attachment at 2.

III. IF THE COMMISSION ADOPTS AN EXCEPTION TO THE “NO EXCESS SUPPLY” RULE, IT SHOULD ALSO ADOPT THE PROPOSED ACTIVITY AND ELIGIBILITY REQUIREMENTS

The Commission seeks comment on its proposal to require bidders to be active on a specific percentage of their current bidding eligibility during each round of the auction.^{25/} It proposes to require bidders to maintain a fixed, high level of activity – specifically between 90 percent and 100 percent of their bidding eligibility – in each round in order to maintain bidding eligibility.^{26/} While this additional complexity can be eliminated if the Commission permits only CMA-level bidding so that it does not require an exception to the “no excess supply” rule, if the exception is retained, T-Mobile generally supports the Commission’s proposal. As T-Mobile has pointed out,^{27/} activity requirements promote truthful bidding and encourage a rapid pace in an auction where time to conclusion remains a priority.

However, to allow greater flexibility, the Commission should consider implementing a lower percentage – for example, 80 percent – of bidding eligibility on which bidders would be required to be active and/or reducing the activity requirement as the auction progresses. Because Auction 105 will involve thousands of licenses awarded in smaller geographic areas, the risk that requests to reduce demand will not be processed (and thus that concurrent requests to increase demand in other areas will not be processed because of a lack of eligibility) would be greater than if the licenses were offered in larger geographic areas. Thus, implementing a lower activity requirement, at least at the beginning of the auction when bidder demands are most likely to change, would allow bidders to better manage the risk of losing eligibility and the other

^{25/} See *Public Notice* ¶¶ 42-43.

^{26/} See *id.* ¶ 43.

^{27/} See Comments of T-Mobile USA, Inc., AU Docket No. 14-252, *et al.*, at 42 (filed Feb. 20, 2015).

uncertainties surrounding the exception to the “no excess supply” rule. Moreover, reducing the activity requirement would, as discussed above, reduce the risk that more densely populated counties remain unsold as a result of the exception to the “no excess supply” rule. To even further reduce the risk of unsold licenses, the Commission should allow *all* bidders to express demand for counties in which there is excess supply, regardless of their remaining bidding eligibility.

The Commission also proposes to permit bidders to submit bids up to an “activity upper limit” after Round 1.^{28/} The activity upper limit would equal the bidder’s current bidding eligibility for the round times a percentage – the activity limit percentage – equal to or greater than 100 percent. The Commission proposes an initial activity limit percentage of 120 percent and a range of potential percentages between 100 percent and 140 percent for Round 2.^{29/} Like the complexities imposed by the adoption of the exception to the “no excess supply” rule, the Commission can eliminate the need for an activity upper limit by permitting only CMA-level bidding.

If the exception to “no excess supply” rule is retained, T-Mobile agrees that the use of an activity upper limit is useful to help a bidder avoid having its eligibility reduced as result of submitted bids that could not be accepted during bid processing.^{30/} It is particularly important for the Commission to allow a bidder to submit bids exceeding its bidding eligibility in Auction 105 in light of the exception to the “no excess supply” rule.^{31/} T-Mobile also supports the

^{28/} See *Public Notice* ¶ 45.

^{29/} See *id.*

^{30/} See *id.* ¶ 44 n.77.

^{31/} As noted above, the exception to the “no excess supply” rule could result in counties remaining unsold if bidders do not have the eligibility to bid on licenses in those counties once they become

Commission’s proposed range of percentages between 100 percent and 140 percent. While AT&T suggests that the magnitude of the potential activity limit percentage increase – possibly up to 140 percent – seems broad enough to enable bidders to use the relief for purposes other than as the Commission intends,^{32/} AT&T’s concerns are speculative. Further, AT&T’s proposed alternative could also create gaming opportunities.^{33/}

IV. CLOCK PRICE INCREMENTS SHOULD BE SET HIGH INITIALLY AND IN A MANNER THAT EQUALIZES DEMAND ACROSS COUNTIES

The Commission seeks comment on its proposal to set the clock price for blocks in a specific county by adding a fixed percentage increment to the posted price for the previous round, as long as demand exceeds supply.^{34/} Under the Commission’s proposed procedures, the percentage increment for a county would depend upon whether the county is in a CMA for which CMA-level bids are allowed.^{35/}

For both counties subject to CMA-level bidding and counties not subject to CMA-level bidding, T-Mobile recommends that the Commission set the initial increment at a high percentage for PALs to account for the likelihood that demand will exceed supply. In addition, for counties in which demand continues to exceed supply by a large margin (*e.g.*, where demand is twice the amount of supply), the Commission should maintain a high increment percentage in

available. Allowing bidders to exceed their bidding eligibility to express demand for counties in which there is excess supply would help mitigate that risk.

^{32/} See Letter from Michael P. Goggin, AT&T, to Ms. Marlene H. Dortch, Secretary, FCC, GN Docket No. 17-258 and AU Docket No. 19-244, at 2 (filed Sept. 16, 2019) (“AT&T *Ex Parte* Letter”).

^{33/} See *id.* (suggesting that the Commission consider solutions tied to the bidder’s contingent eligibility based on proposed withdrawals in a round and start at a percentage much closer to the actual eligibility of the bidder). While AT&T’s proposal could provide sufficient flexibility for the first time a bidder attempts to reallocate its demand to another area, it is unclear how AT&T’s proposal would operate as the auction progresses.

^{34/} See *Public Notice* ¶¶ 55-65.

^{35/} See *id.* ¶ 56.

subsequent rounds until demand equals supply. As T-Mobile has explained, utilizing a high initial increment and maintaining that increment will ensure that the auction moves quickly.^{36/} Indeed, the Commission increased the initial increment percentage from Auction 1002 to Auction 102 and maintained that higher percentage in Auction 103, demonstrating that the Commission has increasingly recognized the value of a relatively higher percentage.^{37/}

For counties subject to CMA-level bidding, the Commission proposes to set the clock price per block using an algorithm that attempts to equalize aggregate demand across the counties in the CMA, thereby discouraging excess supply.^{38/} The Commission also asks whether it should instead apply the basic increment (five percent to 20 percent, with an initial increment of 10 percent) to all counties.^{39/}

If the Commission eliminates both CMA-level and county-level bidding in the same area, as T-Mobile proposes, it will not be required to set prices to equalize aggregate demand across counties in the CMA or create the other auction complexities noted above. However, if both CMA-level and county-level bidding are permitted, the Commission's proposed algorithm may not be the best means to ensure that some counties are not left with excess supply while others are left with excess demand. The Commission should instead consider AT&T's proposal, which

^{36/} See Comments of T-Mobile USA, Inc., AU Docket No. 19-59, at 13-14 (filed May 15, 2019).

^{37/} See *Broadcast Incentive Auction Scheduled to Begin on March 29, 2016; Procedures for Competitive Bidding in Auction 1000, Including Initial Clearing Target Determination, Qualifying to Bid, and Bidding in Auctions 1001 (Reverse) and 1002 (Forward)*, Public Notice, 30 FCC Rcd 8975, ¶ 193 (2015); *Auctions of Upper Microwave Flexible Use License for Next-Generation Wireless Services; Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments, and Other Procedures for Auctions 101 (28 GHz) and 102 (24 GHz)*, Public Notice, 33 FCC Rcd 7575, ¶ 249 (2018); *Incentive Auction of Upper Microwave Flexible Use Service Licenses in the Upper 37, 39, and 47 GHz Bands for Next-Generation Wireless Services; Procedures for Auction 103*, Public Notice, 34 FCC Rcd 5532, ¶ 198 (2019).

^{38/} See Public Notice ¶¶ 60-62.

^{39/} See *id.* ¶ 62.

would (i) treat each block of CMA demand as one block of county demand for each county in the CMA; (ii) set county price increments based on the standard algorithm used for non-CMA counties; and (iii) use the sum of the individual price increments in the counties comprising the CMA as the price increment for the CMA.^{40/} As AT&T points out, this approach would be more equitable and more effective because it would recognize that prices would likely rise more rapidly in counties where there is greater county-specific demand.^{41/}

V. THE COMMISSION SHOULD REJECT CLAIMS THAT THE RESERVE PRICE MUST BE ESTABLISHED BASED ON FEDERAL SHARING COSTS

The Commission seeks comment on the use of a reserve price and notes that it does not propose to establish an aggregate reserve price or block reserve prices that are different from minimum opening bid amounts.^{42/} NTIA has challenged the Commission’s proposal, arguing that the Commission is required to establish a reserve price based on the estimated “sharing costs” of Federal agencies sharing the 3550-3650 MHz band because that band constitutes “eligible frequencies” under Section 113(g)(2) of the NTIA Organization Act, as amended.^{43/}

There is no need for the Commission to establish a reserve price for the 3.5 GHz band based on Federal “sharing costs.” *First*, there are no “sharing costs” of the type that Congress envisioned when it created the Spectrum Relocation Fund (“SRF”). The type of “sharing” that Congress envisioned was Federal incumbent shared use of other Federal spectrum.^{44/} So, for

^{40/} See AT&T *Ex Parte* Letter at 1-2.

^{41/} See *id.*

^{42/} See *Public Notice* ¶¶ 50-54.

^{43/} See NTIA Letter at 2; 47 U.S.C. § 923(g)(2)(B).

^{44/} See H. Rept. 108-137, Commercial Spectrum Enhancement Act (June 3, 2003) <https://www.govinfo.gov/content/pkg/CRPT-108hrpt137/html/CRPT-108hrpt137.htm> (“H.R. 1320 defines relocation costs as expenses that are incurred by federal government agencies in order to achieve comparable capability of systems.”); *O.4.2.2 Estimated Costs; Comparable Capability of Systems*, NTIA Redbook – Annex O: Relocation or Sharing by Federal Government Stations in Support of Reallocation

example, if one Federal agency modified its equipment so that it could share spectrum with another Federal agency, those costs would be covered. While the statute suggests that costs may be reimbursed for spectrum that is auctioned for shared use,^{45/} even that interpretation would not mean that there are reimbursable costs in this case. The rules for the 3.5 GHz band are specifically designed so that Federal incumbents are not required to make any changes to their operations. In fact, the point of the SAS and the Environmental Sensing Capabilities (“ESCs”) is to allow Federal incumbents to continue to operate without change.^{46/} Therefore, Federal incumbents would not incur costs for modifying their current operations or any other “sharing costs” that would be reimbursable under the SRF.

Second, the NTIA letter is at odds with nearly 10 years of the Commission working with NTIA on the use of the 3.5 GHz band.^{47/} NTIA argues that auction proceeds must be sufficient

(May 2013), https://www.ntia.doc.gov/files/ntia/publications/redbook/2017-09/O_17_9.pdf (“[C]omparable capability of systems’ may be achieved by relocating a Federal Government station to a new frequency assignment, by relocating a Federal Government station to a different geographic location, by modifying Federal Government equipment to mitigate interference or use less spectrum . . . and thereby permitting spectrum sharing (including sharing among relocated federal entities and incumbents to make spectrum available for non-federal use) or relocation, or by utilizing an alternative technology.”).

^{45/} See 47 U.S.C. § 923(g)(3).

^{46/} See *2018 3.5 GHz Report and Order* ¶ 3 (“Incumbents comprise the first tier (Incumbent Access) [of the three-tiered access and authorization framework] and receive protection from all other users.”); *Amendment of the Commission’s Rules with Regard to Commercial Operations in the 3550-3650 MHz Band*, Report and Order, 30 FCC Rcd 3959, ¶ 81 (2015) (“Notably, automated frequency assignment is necessary to ensure consistent spectrum access for Citizens Broadband Radio Service users and to ensure protection of Incumbent Users.”); *id.* ¶ 382 (“We agree with NTIA’s suggestion to allow the use of one or more ESCs to detect federal frequency use in and adjacent to the 3.5 GHz Band. . . . [S]pectrum sensing technologies – in conjunction with management of CBSDs by an approved SAS – would allow Citizens Broadband Radio Service users to operate near the coastline on a channel or frequency not being used by federal radar systems. This would allow for more efficient and widespread commercial use of the spectrum while ensuring that federal use of the band is protected. Moreover, sensing technology would allow federal users to deploy next generation radar systems without fear of interference from commercial operators.”).

^{47/} See *Amendment of the Commission’s Rules with Regard to Commercial Operations in the 3550-3650 MHz Band*, Notice of Proposed Rulemaking and Order, 27 FCC Rcd 15594, ¶ 1 (2012) (“The 3.5

to cover Federal relocation or sharing costs, as required by the Commercial Spectrum Enhancement Act (“CSEA”).^{48/} But throughout the long history of this proceeding, NTIA has been silent regarding the application of the CSEA to this band.^{49/}

Finally, without information about relocation or sharing costs, the Commission cannot establish a reserve price as part of its auction procedures. While NTIA states that it is “making every effort to accelerate” development of those costs,^{50/} it seems impractical for NTIA to meet its statutory deadline and for the Commission to incorporate the cost information in its final procedures before the auction begins.

VI. CONCLUSION

T-Mobile looks forward to the Commission’s upcoming auction of PALs in the 3550-3650 MHz band. To ensure its success, the Commission must adopt its proposal to permit CMA-level bidding in the top markets, but refrain from allowing county-level bidding in those same markets. This approach would be consistent with the Commission’s decisions in this proceeding and appropriately balance the needs of the various stakeholders that may participate in the auction without adding unnecessary complexity to the auction process. The Commission must

GHz Band was identified by the National Telecommunications and Information Administration (NTIA) for shared federal and non-federal use in the 2010 Fast Track Report.”).

^{48/} See NTIA Letter at 3.

^{49/} In contrast, the Commission and NTIA were actively engaged and worked collaboratively throughout the AWS-3 proceeding in full recognition of the application of the CSEA to the AWS-3 band. For example, prior to seeking comment on service rules for the AWS-3 band, the Commission had already notified NTIA that it planned to commence an auction of the spectrum, and NTIA had responded with several requests to the Commission. See, e.g., *Amendment of the Commission’s Rules with Regard to Commercial Operations in the 1695-1710 MHz, 1755-1780 MHz, and 2155-2180 MHz Bands, et al.*, Notice of Proposed Rulemaking and Order on Reconsideration, 28 FCC Rcd 11479, ¶ 13 (2013).

^{50/} NTIA Letter at 2.

also reject suggestions that a separate reserve price is necessary to meet Federal relocation or sharing costs.

Respectfully submitted,

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