

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

In the Matter of )  
 )  
Policies Regarding Mobile Spectrum Holdings ) WT Docket No. 12-269

**COMMENTS OF T-MOBILE USA, INC.**

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**COMMENTS OF T-MOBILE USA, INC.**

T-Mobile USA, Inc. (“T-Mobile”) submits these comments in response to the Notice of Proposed Rulemaking in the above-referenced proceeding,<sup>1/</sup> which seeks input on whether to revise the rules and policies applicable to the acquisition of spectrum by mobile wireless carriers. The Commission’s review of these policies is timely and appropriate. Spectrum has always been a critical input to a carrier’s ability to compete, but the growth of mobile broadband services has created a skyrocketing demand for additional spectrum. In order to promote a competitive wireless marketplace, the Commission’s rules must ensure that all carriers have a meaningful opportunity to acquire spectrum to meet this demand.

There are two principal means by which carriers obtain spectrum – through auctions and in secondary market transactions. T-Mobile agrees with the Commission’s proposal to implement bright-line spectrum limits for initial licenses acquired through competitive bidding. Such an approach provides certainty for bidders and is far more administratively efficient than a post-auction case-by-case review. Trying to unwind the results of a completed auction with multiple bidders to correct an anticompetitive aggregation of spectrum by one or two bidders would be very disruptive and would, in most cases, produce results that are sub-optimal for spectrum policy and competition. Setting clear limits in advance of an auction context will not

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<sup>1/</sup> See *Policies Regarding Mobile Spectrum Holdings*, Notice of Proposed Rulemaking, WT Docket No. 12-269, FCC 12-119 (rel. Sept. 28, 2012) (“*NPRM*”).

only allow all bidders to proceed with greater certainty, but will also give the Commission greater assurance that the results of the auction will not need to be reversed after the fact. For acquisitions of spectrum in the secondary market, however, the case-by-case approach is more appropriate because it allows the Commission to evaluate the competitive and marketplace issues specific to a particular transaction. In either case, the Commission's spectrum management policies should include measures to prevent undue concentration in the "beachfront" spectrum below 1 GHz. This hybrid approach will ensure that carriers have the quality as well as the quantity of spectrum that they need to compete effectively.

## I. INTRODUCTION AND SUMMARY

T-Mobile, a wholly-owned subsidiary of Deutsche Telekom AG ("DT"), is headquartered in Bellevue, Washington, and offers nationwide wireless voice and data services to individual and business customers. It is the fourth largest wireless carrier in the United States and serves approximately 33 million subscribers. T-Mobile has continuously developed and implemented new and more efficient technologies and techniques to maximize the capacity of its spectrum.<sup>2/</sup> It is also investing significant funds to expand its spectrum portfolio,<sup>3/</sup> rationalizing its existing

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<sup>2/</sup> See Declaration of Dennis Roberson, WT Docket No. 12-4, ¶ 13 and Table 2 (March 26, 2012) ("Roberson Declaration") (showing that T-Mobile's spectral efficiency exceeds that of Verizon Wireless by more than 50 percent), attached as Exhibit A to Reply of T-Mobile USA, Inc. to Opposition to Petition to Deny, WT Docket No. 12-4 (filed March 26, 2012).

<sup>3/</sup> T-Mobile recently has obtained additional spectrum from AT&T and Verizon Wireless. See *T-Mobile License LLC, AT&T Mobility Spectrum LLC, and New Cingular Wireless PCS, LLC Seek FCC Consent to the Assignment of AWS-1 Licenses*, Public Notice, 27 FCC Rcd 436 (2012); *Applications of T-Mobile License LLC and Cellco Partnership d/b/a Verizon Wireless for Consent to Assign Licenses*, Memorandum Opinion and Order and Declaratory Ruling, 27 FCC Rcd 10698 (2012). In addition, T-Mobile has agreed to merge with MetroPCS and create a new company which would, among other things, combine the spectrum assets of the two companies. See *Deutsche Telekom AG, T-Mobile USA, Inc. and MetroPCS Communications, Inc. Seek FCC Consent to the Transfer of Control of PCS Licenses and AWS-1 Licenses and Leases, One 700 MHz License, and International 214 Authorizations Held by MetroPCS Communications, Inc. and by T-Mobile USA, Inc. to Deutsche Telekom AG*, Public Notice, WT Docket No. 12-301, DA 12-1730 (rel. Oct. 26, 2012).

spectrum holdings through swaps with other carriers,<sup>4/</sup> making substantial progress in a modernization and 4G evolution effort that will enable Long-Term Evolution (“LTE”) service for its customers beginning in 2013.<sup>5/</sup>

T-Mobile also consistently seeks to enhance the consumer experience by providing a wide selection of affordable products and services. For instance, T-Mobile recently announced that it will offer unlimited data plans with no data caps, speed limits or overages, making it the only carrier with a nationwide 4G network to offer unlimited nationwide 4G data.<sup>6/</sup> Under T-Mobile’s Challenger Strategy, T-Mobile is repositioning its brand, refreshing its stores and

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<sup>4/</sup> See, e.g., *T-Mobile License LLC, Cricket License Company, LLC, Cook Inlet/VS GSM VII PCS, LLC, Savary Island License A, LLC, and Savary Island License B, LLC Seek FCC Consent to the Assignment of Personal Communications Service and AWS-1 Licenses*, Public Notice, 27 FCC Rcd 5206 (2012); *AT&T, T-Mobile, and Cook Inlet Seek FCC Consent to the Assignment of PCS Licenses and an AWS-1 License, Pleading Cycle Established*, Public Notice, 27 FCC Rcd 12278 (2012); *AT&T, T-Mobile, and Cook Inlet Seek FCC Consent to the Assignment of PCS Licenses and an AWS-1 License, Pleading Cycle Established*, Erratum, DA 12-1605 (rel. Oct. 12, 2012); *Wireless Telecommunications Bureau, Assignment of License Authorization Applications, Transfer of Control of Licensee Applications, De Facto Transfer Lease Applications and Spectrum Manager Lease Notifications, Designated Entity Reportable Eligibility Event Applications, and Designated Entity Annual Reports Action*, Public Notice, Report No. 7947, at 7-8, 24, 28 (rel. July 25, 2012) (granting assignment applications and accepting lease notifications of T-Mobile License LLC, Powertel Memphis Licenses, Inc. and Cellular South Licenses, LLC). This assignment transaction was consummated on September 10, 2012, and a Public Notice appeared on September 12, 2012 showing the consummation notices. See *Wireless Telecommunications Bureau, Assignment of License Authorization Applications, Transfer of Control of Licensee Applications, De Facto Transfer Lease Applications and Spectrum Manager Lease Notifications, Designated Entity Reportable Eligibility Event Applications, and Designated Entity Annual Reports Action*, Public Notice, Report No. 8070 (rel. Sept. 12, 2012).

<sup>5/</sup> See T-Mobile Issues and Insights Blog, *Fast Progress on 4G Network Modernization* (June 14, 2012), available at <http://blog.t-mobile.com/2012/06/14/fast-progress-on-4g-network-modernization/>; see also T-Mobile Release, *T-Mobile USA Announces Reinvigorated Challenger Strategy* (Feb. 23, 2012), available at <http://newsroom.t-mobile.com/articles/ReinvigoratedChallengerStrategy>. If its proposed merger with MetroPCS is approved, the combined entity will have a network capable of supporting at least 20x20 MHz LTE deployments in many areas – which allows for higher speeds and throughput rates – and will enable a broader and deeper roll-out of 4G LTE services. See FCC ULS File No. 0005446627, *Description of Transaction, Public Interest Showing, and Related Demonstrations*, at i (filed Oct. 18, 2012) (“DT-MetroPCS Application”).

<sup>6/</sup> See T-Mobile Release, *T-Mobile Celebrates 10 Years of Innovation with Launch of Unlimited Nationwide 4G Data Plans* (Sept. 5, 2012), available at <http://newsroom.t-mobile.com/articles/t-mobile-celebrates-10-years-and-launches-unlimited-nationwide-4g-data-plans>.

aggressively pursuing business-to-business contracts in both the small and medium enterprise and large business markets.<sup>7/</sup>

Even though T-Mobile is using its spectrum efficiently and taking advantage of the secondary market, where possible, to strengthen its competitive position, it will require additional spectrum going forward to meet rapidly accelerating consumer demand.<sup>8/</sup> According to the 2012 semi-annual wireless industry survey released by CTIA, wireless data traffic increased 104 percent from July 2011 to June 2012,<sup>9/</sup> illustrating “Americans’ growing appetite for more mobile data and the wireless industry’s need for more spectrum to meet their demands.”<sup>10/</sup> A similar report issued by Cisco predicts that global mobile data traffic will increase 18-fold between 2011 and 2016 at a compound annual growth rate of 78 percent,<sup>11/</sup> and, as reported by the Council of Economic Advisors, “[i]t is unlikely that wireless carriers will be able to accommodate this surging demand without additional spectrum.”<sup>12/</sup>

The Commission’s mobile spectrum holdings policies are critical to ensuring that T-Mobile and other competitive providers are able to obtain the quantity and quality of spectrum

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<sup>7/</sup> See DT-MetroPCS Application, at Attachment 1, at 5.

<sup>8/</sup> See *NPRM* ¶ 4 (“Access to spectrum is a precondition to the provision of mobile wireless services. Ensuring the availability of sufficient spectrum is critical for promoting the competition that drives innovation and investment.”).

<sup>9/</sup> See CTIA-The Wireless Association, *Semi-Annual Wireless Industry Survey* (Apr. 13, 2012), available at <http://www.ctia.org/advocacy/research/index.cfm/AID/10316>.

<sup>10/</sup> CTIA Press Release, *Consumer Data Traffic Increased 104 Percent According to CTIA-The Wireless Association Semi-Annual Survey* (Oct. 11, 2012), available at <http://www.ctia.org/media/press/body.cfm/prid/2216>.

<sup>11/</sup> See Cisco, *Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2011-2016*, at 3 (Feb. 14, 2012), available at [http://www.cisco.com/en/US/solutions/collateral/ns341/ns525/ns537/ns705/ns827/white\\_paper\\_c11-520862.pdf](http://www.cisco.com/en/US/solutions/collateral/ns341/ns525/ns537/ns705/ns827/white_paper_c11-520862.pdf).

<sup>12/</sup> Council of Economic Advisors, *The Economic Benefits of New Spectrum for Wireless Broadband*, at i (Feb. 2012), available at [http://www.whitehouse.gov/sites/default/files/cea\\_spectrum\\_report\\_2-21-2012.pdf](http://www.whitehouse.gov/sites/default/files/cea_spectrum_report_2-21-2012.pdf).

necessary to meet this growing demand and compete effectively. The Commission has historically used caps and screens to ensure an efficient, pro-competitive distribution of spectrum among multiple carriers to promote innovation and consumer interests. The original cellular/Personal Communications Service (“PCS”) cross-ownership rule was a hard *cap* that prohibited the two cellular licensees from obtaining more than 10 megahertz of broadband PCS spectrum in their cellular service areas and prohibited broadband PCS licensees from obtaining more than 40 megahertz of total spectrum allocated to broadband PCS.<sup>13/</sup> The Commission later replaced this rule with another cap, this time on the overall amount of commercial mobile radio service (“CMRS”) spectrum that limited an entity to no more than 45 megahertz of spectrum in three radio services – broadband PCS, cellular and Specialized Mobile Radio.<sup>14/</sup>

The Commission abandoned the spectrum cap in 2001, substituting instead a case-by-case review of individual transactions.<sup>15/</sup> This is the approach that remains in place today. Pursuant to this case-by-case review, the Commission analyzes spectrum transactions using a spectrum *screen*. Unlike the hard cap, the screen does not necessarily limit an entity’s spectrum holdings. Rather, the screen, which is set at one-third of the available mobile voice and broadband spectrum post-transaction, is simply a means of identifying markets where the

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<sup>13/</sup> See *Amendment of the Commission’s Rules to Establish New Personal Communications Services*, Second Report and Order, 8 FCC Rcd 7700, ¶¶ 61, 106 (1993) (“1993 PCS Second Report and Order”).

<sup>14/</sup> See *Implementation of Sections 3(n) and 332 of the Communications Act, et al.*, Third Report and Order, 9 FCC Rcd 7988, ¶ 263 (1994) (“1994 CMRS Third Report and Order”). This cap was imposed in addition to the cellular/PCS cross-ownership rule, *i.e.* those caps could not be exceeded either. The cellular/PCS cross-ownership rule was eliminated in 1996, leaving the CMRS cap in place. See *Amendment of Parts 20 and 24 of the Commission’s Rules; Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap; Amendment of the Commission’s Cellular/PCS Cross-Ownership Rule*, Report and Order, 11 FCC Rcd 7824, ¶¶ 94-104 (1996). The Commission subsequently raised the cap in rural areas to 55 megahertz, but retained the 45 megahertz cap elsewhere. See *1998 Biennial Regulatory Review Spectrum Aggregation Limits for Wireless Telecommunications Carriers, et al.*, Report and Order, 15 FCC Rcd 9219, ¶¶ 77-84 (1999).

<sup>15/</sup> See *2000 Biennial Regulatory Review Spectrum Aggregation Limits For Commercial Mobile Radio Services*, Report and Order, 16 FCC Rcd 22668, ¶¶ 47-58 (2001).

Commission will conduct a closer review of the competitive impact of the transaction, which may lead it to order spectrum divestitures or other forms of relief.

Since 2001, however, the changes in technology, spectrum availability, and the mobile marketplace described above warrant a fresh look at the Commission's mobile spectrum holdings policies.<sup>16/</sup> Accordingly, the *NPRM* seeks comment on a range of issues, including whether the Commission should retain or modify its current case-by-case approach to evaluating mobile spectrum holdings in the context of spectrum transactions and auctions, adopt bright-line limits, or implement an alternative methodology. It suggests that the Commission could adopt different approaches for reviewing spectrum holdings in secondary transactions and in the auction context. The *NPRM* also seeks comment on implementation issues such as how to assess which spectrum bands should be included in the analysis of spectrum holdings; whether the spectrum holdings policy should make distinctions among different bands; and what attribution rules, remedies, and transition procedures it should adopt. The policies adopted by the Commission in this proceeding will inform its upcoming incentive auction of the broadcast television spectrum pursuant to the Spectrum Act as well as the other spectrum auctions mandated by Congress in the Spectrum Act.<sup>17/</sup>

In today's marketplace – characterized by significant and growing demand for spectrum, the use of a wide array of bands to meet that demand, and the risk that the most dominant carriers will obtain a lock on the particularly valuable lower band frequencies – T-Mobile proposes a

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<sup>16/</sup> See *NPRM* ¶¶ 9-10 (noting that “[t]he Rural Cellular Association (RCA) has urged the Commission to ‘take a fresh approach to its competitive analysis’”); see also CCA Press Release, *CCA Commends FCC on Mobile Spectrum Holdings and Incentive Auction NPRMs* (Sept. 28, 2012), available at <http://competitivecarriers.org/press/rca-press-releases/cca-commends-fcc-on-mobile-spectrum-holdings-and-incentive-auction-nprms/9110523> (thanking the Commission for its focus on “fixing” the spectrum screen).

<sup>17/</sup> See 47 U.S.C. § 1401 *et seq.*



hybrid approach. In the auction context, the goals of certainty and administrative practicality strongly suggest the adoption of a cap on an entity’s overall spectrum holdings in a market. It may also be appropriate in some cases for the Commission to adopt a separate “auction-specific” cap on the amount of spectrum the entity may acquire in each market in the spectrum band being auctioned (but this can be determined in the proceeding to adopt licensing and service rules that precedes every auction). For secondary market transactions, however, the Commission should continue to apply a case-by-case approach, including the use of a spectrum screen, which allows it to undertake a more particularized analysis of the acquirer’s spectrum holdings.

In either case, the Commission’s spectrum management policies must recognize that all spectrum is not created equal. Carriers today operate in a myriad of spectrum bands that have different technical characteristics. The Commission itself has identified the spectrum below 1 GHz as particularly valuable because of its propagation characteristics. Those bands are also at risk of becoming unduly concentrated. The Commission should therefore evaluate holdings below 1 GHz , through a separate cap in the auction context and a separate screen in a transaction, so that no carrier dominates this competitively vital spectrum. T-Mobile’s proposed hybrid approach will provide an efficient combination of certainty and flexibility, while ensuring the competitive availability of new “beachfront” spectrum below 1 GHz.

## **II. THE COMMISSION SHOULD INSTITUTE SPECTRUM CAPS FOR AUCTIONS AND RETAIN THE CASE-BY-CASE APPROACH TO SECONDARY TRANSACTIONS**

The *NPRM* seeks comment on whether the Commission should adopt bright-line caps for the acquisition of spectrum through auctions while retaining its case-by-case analysis for evaluating secondary market transactions.<sup>18/</sup> T-Mobile believes that this hybrid approach would

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<sup>18/</sup> See *NPRM* ¶ 19.

give the Commission the appropriate tools for reviewing spectrum holdings. A bright-line test, or cap, would give applicants certainty as they plan for and participate in an auction. Conducting an auction and then, only when it is over, conducting a proceeding to determine on a case-by-case basis whether winning bidders must divest spectrum creates substantial uncertainty, not only for the winning bidder, but for all other auction participants as well. Such an approach introduces significant inefficiency and unfairness into the auction process itself and potentially disadvantages other bidders who must compete against entities that may be willing to bid aggressively for licenses in excess of a screen for the strategic advantages of disrupting the auction and their smaller competitors' attempts to acquire additional frequencies. These considerations do not arise in secondary transactions. For these transactions, a market-based case-by-case analysis informed by spectrum screens will allow the Commission to take a variety of marketplace conditions into consideration and impose post-transaction adjustments as appropriate in a particular instance. As discussed more fully below, however, the Commission should separately evaluate a carrier's spectrum holdings below 1 GHz in both the auction and transaction contexts.

**A. A Cap Should be Used in Auctions.**

Participating in an FCC auction is a complex, time consuming, and expensive process, regardless of the outcome. It is unfair to would-be participants if they cannot determine in advance if they will be able to retain the spectrum for which they are the high bidder. Similarly, auction results may be compromised if an entity that is the high bidder for particular spectrum is later required to divest that spectrum. Post-auction divestitures are problematic. They require Commission resources to determine if divestiture should occur and delay the ultimate licensing

of spectrum to entities that will use it to offer services to the public. Yet, the Commission's policies today permit that uncertainty.<sup>19/</sup>

T-Mobile therefore proposes that the Commission should adopt hard caps applicable to the acquisition of initial licenses at auction – an overall cap on spectrum holdings applied on a market-by-market basis. Entities would be prohibited from acquiring spectrum through an auction where the additional spectrum would cause them to exceed the relevant limit. Re-instituting caps will encourage auction participation – and potentially yield greater aggregate auction revenues – by signaling that one or two providers will not be able to acquire all of the available spectrum. As the *NPRM* acknowledges, “[b]right-line limits could offer providers greater certainty, clarity, and predictability regarding which licenses they could acquire.”<sup>20/</sup> Caps will also accelerate post-auction review of licensees’ holdings, allowing the spectrum to be put to use more quickly.

As an aggregate cap, the FCC could use an amount equal to one-third of the spectrum available for mobile wireless services. A one-third limitation is consistent with past and current Commission policy. In the *1994 CMRS Third Report and Order*, for example, the Commission allocated 120 MHz of PCS spectrum and adopted a service specific limit of 40 MHz.<sup>21/</sup> The Commission also utilizes a one-third limit under its current case-by-case analysis because it “envisions at least three competitors having access to approximately the same amount of suitable spectrum for providing mobile wireless broadband service.”<sup>22/</sup> In addition, using a one-third test

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<sup>19/</sup> See, e.g., *Union Telephone Company, Cellco Partnership d/b/a Verizon Wireless, Applications for 700 MHz Band Licenses, Auction No. 73*, Memorandum Opinion and Order, 23 FCC Rcd 16787 (2008) (granting Verizon Wireless’ applications for licenses won in Auction 73 subject to the effectuation of its voluntary divestiture of 10 megahertz of licensed spectrum in a particular market).

<sup>20/</sup> *NPRM* ¶ 20.

<sup>21/</sup> See *1994 CMRS Third Report and Order* ¶¶ 263-264.

<sup>22/</sup> *NPRM* ¶ 34.

would permit the Commission to adjust the actual amount of spectrum covered by the cap in the future if additional spectrum is made available through, for example, an incentive auction under the Spectrum Act. In that case, the amount of spectrum covered by the cap could be expanded to account for the additional spectrum.

The Commission seeks comment on whether it should “consider applying a band-specific spectrum limit in the context of any band-specific service rules” that it adopts prior to an auction.<sup>23/</sup> As discussed below, the Commission should as part of this proceeding adopt a band-specific cap on auctions of spectrum below 1 GHz. With respect to other bands, T-Mobile strongly urges the Commission to preserve its right to impose band-specific auction caps in the future. Band-specific caps would be established in the relevant rulemaking proceeding adopting the licensing and service rules for the spectrum to be auctioned. It is quite possible that the Commission may determine that individual bands are sufficiently valuable or have other unique characteristics to merit separate aggregation limits for future auctions (which could be higher or lower than the otherwise applicable cap). Such an approach will ensure that competitive carriers are not foreclosed from acquiring the high quality spectrum necessary to effectively compete with larger carriers.

Using a band-specific aggregation limit in addition to an overall cap on spectrum holdings in a market is consistent with past Commission practice. As noted above, the Commission has both limited PCS holdings *and also* imposed an overall CMRS cap in the past.<sup>24/</sup> The cap on PCS holdings was imposed, for among other reasons, to foster broad participation in the provision of PCS.<sup>25/</sup> While maintaining that a PCS spectrum cap was still

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<sup>23/</sup> *Id.* ¶ 21.

<sup>24/</sup> *See 1993 PCS Second Report and Order* ¶¶ 61, 106; *1994 CMRS Third Report and Order* ¶ 263.

<sup>25/</sup> *See 1993 PCS Second Report and Order* ¶¶ 58-61.

necessary, the Commission implemented the 45 megahertz CMRS limit in addition to the PCS and cellular caps in order to “help ensure diversity in the provision of high capacity, wide-area land mobile radio service.”<sup>26/</sup> The Commission noted that the 45 megahertz cap in conjunction with the service specific limits for PCS and cellular would “prevent excessive concentration of licenses by a single carrier, but [would also] enable PCS and cellular operators with 40 MHz of spectrum to obtain additional spectrum so they have incentives to offer other services to take advantage of new innovation or economies of scale.”<sup>27/</sup> The same dual-prong approach may be appropriate to prevent concentration in a particular spectrum band as well as across all mobile wireless spectrum.

The Commission specifically contemplates treating broadcast television spectrum differently in its separate, but complementary, rulemaking proceeding regarding incentive auctions mandated by the Spectrum Act. It notes that it could, for example, adopt “a rule that permits any single participant in the auction to acquire no more than one-third of all 600 MHz spectrum being auctioned in a given licensed area” and seeks comment generally on whether it should “adopt a threshold that recognizes the different characteristics of different spectrum bands.”<sup>28/</sup>

As the *NPRM* in this proceeding suggests, such band-specific spectrum limits would be well within the Commission’s authority to “adopt and enforce rules of general applicability, including rules concerning spectrum aggregation that promote competition.”<sup>29/</sup> Such limits would apply to all potential bidders in the auction, *i.e.*, no bidder could acquire in any market an

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<sup>26/</sup> *1994 CMRS Third Report and Order* ¶ 264.

<sup>27/</sup> *Id.* ¶ 263.

<sup>28/</sup> *Expanding the Economic and Innovation Opportunities of Spectrum through Incentive Auctions*, Notice of Proposed Rulemaking, GN Docket No. 12-268, FCC 12-118, ¶ 384 (rel. Oct. 2, 2012).

<sup>29/</sup> *NPRM* ¶ 21; 47 U.S.C. § 309(j).

amount of new spectrum over the specified limit. Moreover, the caps proposed here that are not band-specific – on all spectrum and on all spectrum below 1 GHz – are also permissible under the applicable statutory standard. While the impact of those rules on a particular entity would depend on the entity’s existing spectrum holdings, it is well-established that a rule is of general applicability even if its effect is limited to only to a subset of entities within an industry sector. Indeed, courts have affirmed that a rule of general applicability is one that has “a direct and significant impact upon the substantive rights of the general public *or a segment thereof*.”<sup>30/</sup> As long as the rule is based on a “genuine classification,” such as, for instance, the amount of band-specific spectrum a carrier could hold, the rule would be considered a rule of general applicability even if it affected only a few parties.<sup>31/</sup> A rule need not have “industry-wide” effect in order to be considered generally applicable.

**B. A Case-by-Case Approach Should be Used for Transactions.**

For transactions, the FCC should continue to use a case-by-case analysis to evaluate the proposed aggregation. A case-by-case approach will give the Commission flexibility to examine the competitive factors specific to particular acquisitions. Such flexibility will permit the Commission to better ensure that spectrum acquisitions serve the public interest, convenience and necessity. Significantly, the considerations militating in favor of caps for auctions do not generally apply in transactions. In auctions, the inability to assess whether the FCC would

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<sup>30/</sup> *Lewis v. Weinberger*, 415 F. Supp. 652, 659 (D.N.M. 1976) (*emphasis added*); *see also Aiken v. Miller*, 442 F. Supp. 628, 653-54 (E.D. Cal. 1977) (“A substantive rule of general applicability . . . is a substantive rule which changes existing practice and has a substantial impact on a segment of those regulated.”).

<sup>31/</sup> *See Am. Airlines v. Civil Aeronautics Bd.*, 359 F.2d 624, 631 (D.C. Cir. 1966) (finding that rules based on a “genuine classification” are permissible as generally applicable rules even if they have the effect of treating different classes of competitors within an industry differently, as long as the “classes . . . [are] analyzed both functionally and in terms of capacity for furthering the promotional purposes of the [statute]” and the rule is not “individual in impact and condemnatory in purpose”).

permit spectrum aggregation affects other parties in the auction, not only the bidder. In transactions, only the parties themselves are directly affected by the Commission's evaluation of spectrum holdings. Similarly, while post-auction divestitures are problematic, the Commission has routinely approved transactions with post-transaction divestitures, which if properly designed can be an effective remedy for anticompetitive spectrum accumulation by the acquiring party.<sup>32/</sup>

As discussed above, the Commission has in the past utilized a spectrum screen as part of its case-by-case analysis to help identify markets where the acquisition of spectrum raises the need for a further competitive analysis. That approach has generally worked well, but the Commission should retain the flexibility to consider various factors in considering a particular transaction. Such an approach will allow the Commission to consider the variables that it determines are important in a specific transaction and to tailor any remedies to address specific harms. As it does today, the Commission's case-by-case analysis should take into account all of the spectrum available for similar services and should, for the reasons noted above, consider whether a carrier will be acquiring spectrum that will give it more than one-third of the spectrum available in a market.

The spectrum that the Commission takes into consideration as part of its case-by-case approach can change over time as additional spectrum is made available or regulatory or technical impediments are overcome to make spectrum more appropriate for mobile wireless

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<sup>32/</sup> See, e.g., *Applications of T-Mobile License LLC and Cellco Partnership d/b/a Verizon Wireless for Consent to Assign Licenses*, Memorandum Opinion and Order and Declaratory Ruling, 27 FCC Rcd 10698 (2012); *Applications of AT&T Inc. and Centennial Communications Corp. for Consent to Transfer Control of Licenses, Authorizations, and Spectrum Leasing Arrangements*, Memorandum Opinion and Order, 24 FCC Rcd 13915, ¶ 111 (2009) (requiring divestiture in seven markets); *Applications of Cellco Partnership d/b/a Verizon Wireless and Atlantis Holdings LLC for Consent to Transfer Control of Licenses, Authorizations, and Spectrum Manager and De Facto Transfer Leasing Arrangements and Petition for Declaratory Ruling that the Transaction is Consistent with Section 310(b)(4) of the Communications Act*, Memorandum Opinion and Order and Declaratory Ruling, 23 FCC Rcd 17444, ¶ 159 (2008) (requiring Verizon Wireless to divest in five markets in addition to the 100 markets required by the Department of Justice and voluntarily agreed to by Verizon Wireless).

use.<sup>33/</sup> In the interests of ensuring predictability and transparency, however, the Commission should not change the spectrum that it takes into consideration as part of its case-by-case approach in the context of individual transactions. Instead, the Commission should assess, when it makes spectrum available, or at another appropriate time (when it changes the rules governing particular spectrum bands), whether and/or when that spectrum will be considered as part of the Commission’s case-by-case analysis.

### **III. BOTH APPROACHES SHOULD RECOGNIZE THE DIFFERENCE IN SPECTRUM ABOVE AND BELOW 1 GHZ**

The Commission seeks comment on whether it should adopt an approach to evaluating a licensee’s mobile spectrum holdings “that accounts for differing characteristics of spectrum bands.”<sup>34/</sup> T-Mobile strongly endorses that approach. Regardless of whether the Commission evaluates spectrum aggregation in the auction context or in transactions, the Commission’s spectrum management tools must recognize the fact that carriers today operate on a range of upper and lower bands with different propagation characteristics and significantly different market values. There is no dispute that the lower band spectrum is uniquely valuable, but there is currently little lower band spectrum left for assignment, and the lion’s share of the available spectrum is under the control of the two largest carriers. To ensure the widest possible availability of lower band spectrum, the Commission should adopt a hybrid approach for both auctions and transactions that recognizes the difference in the value of spectrum above and below 1 GHz.

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<sup>33/</sup> As Chairman Genachowski has recognized, the Commission currently adjusts its analysis “[w]here there are significant changes in the marketplace that affect the practical availability of spectrum.” Letter from the Honorable Julius Genachowski, Chairman, FCC, to the Honorable Fred Upton, Chairman, Committee on Energy and Commerce, U.S. House of Representatives, at 3 (Dec. 20, 2011).

<sup>34/</sup> *NPRM* ¶ 35.



The Commission has confirmed the importance of separately evaluating spectrum holdings below 1 GHz, stating that it is “prudent to inquire about the potential impact of [an acquirer’s] aggregation of spectrum below 1 GHz” in evaluating proposed spectrum acquisitions.<sup>35/</sup> The Commission has consistently recognized that spectrum below 1 GHz is more valuable than spectrum above 1 GHz because its more favorable propagation characteristics allow for better coverage inside buildings and across larger geographic areas, including those with adverse climates and challenging terrain.<sup>36/</sup> Lower-band spectrum also provides higher spectral efficiency over a given area than higher-band spectrum, and systems operating in lower-band frequencies can deliver more received signal power to locations within a same-size cell as systems operating in higher-band spectrum.<sup>37/</sup> Importantly for competition, these characteristics allow systems operating in lower-band spectrum to provide the same geographic coverage at a lower cost than higher-band spectrum. The Department of Justice has likewise recognized that spectrum above and below 1 GHz have widely disparate technical characteristics that affect how the bands can be used to deliver mobile services.<sup>38/</sup>

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<sup>35/</sup> See *Application of AT&T Inc. and Qualcomm Incorporated for Consent to Assign Licenses and Authorizations*, Order, 26 FCC Rcd 17589, ¶ 49 (2011) (“*AT&T/Qualcomm Order*”); *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions with Respect to Mobile Wireless, Including Commercial Mobile Services*, Fifteenth Report, 26 FCC Rcd 9664, ¶ 307 (2011) (“*Fifteenth Report*”).

<sup>36/</sup> See *NPRM* ¶ 35; *AT&T/Qualcomm Order* ¶ 49 (“The more favorable propagation characteristics of lower frequency spectrum (*i.e.*, spectrum below 1 GHz) allow for better coverage across larger geographic areas and inside buildings.”); *Fifteenth Report* ¶ 292 (“It is well established that lower frequency bands – such as the 700 MHz and Cellular bands – possess more favorable intrinsic spectrum propagation characteristics than spectrum in higher bands.”).

<sup>37/</sup> See Roberson Declaration at 8-9 (noting that the reason lower-band spectrum is able to provide a higher spectral efficiency over a given area is because the better propagation characteristics of that spectrum “allow a network using low-band frequencies to deliver a higher received signal level over the cell area”).

<sup>38/</sup> See *United States v. Verizon Communications Inc. and ALLTEL Corp.*, Competitive Impact Statement, Case No. 08-cv-1878, at 5-6 (filed Oct. 30, 2008), available at <http://www.justice.gov/atr/cases/f238900/238947.pdf> (stating that “because of the characteristics of PCS spectrum, providers holding this type of spectrum generally have found it less attractive to build out in

These differences make it vital for the Commission to implement rules to prevent excessive aggregation of desirable spectrum below 1 GHz. Absent those rules, carriers may be able to gain a competitive advantage by unfairly aggregating spectrum below 1 GHz, even if their overall spectrum holdings remain below the limits set by the Commission. When the Commission originally adopted a spectrum cap for all CMRS holdings, it explained that a spectrum cap was necessary in order to prevent excessive aggregation by any one or several CMRS licensees.<sup>39/</sup> Today, spectrum holdings of below 1 GHz are already significantly concentrated. According to the Commission, AT&T, Inc. and Verizon Wireless hold approximately 73 percent of the valuable spectrum below 1 GHz, measured on a MHz-POPs basis.<sup>40/</sup> A separate evaluation – for both auctions and transactions – for spectrum below 1 GHz is therefore necessary and appropriate in order to prevent further concentration in those bands. In both cases, the Commission should set the cap (in the case of auctions) or the screen (in the case of transactions) at one-third of the spectrum available below 1 GHz. Just as no carrier should be permitted to aggregate more than one-third of the spectrum available overall, no carrier should be permitted to hold more than one-third of the uniquely valuable and competitively critical spectrum below 1 GHz.

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rural areas”); *United States v. AT&T Inc. and Dobson Communications Corp.*, Competitive Impact Statement, Case No. 1:07-cv-01952, at 5, 11, 13 (filed Oct. 30, 2007), *available at* <http://www.justice.gov/atr/cases/f227300/227309.pdf> (asserting that “the propagation characteristics of [1900 MHz PCS] spectrum are such that signals extend to a significantly smaller area than do 800 MHz cellular signals. The relatively higher cost of building out 1900 MHz spectrum, combined with the relatively low population density of the areas in question, make it unlikely that competitors with 1900 MHz spectrum will build out their networks to reach the entire area served by” the two 800 MHz Cellular providers).

<sup>39/</sup> See *1994 CMRS Third Report and Order* ¶¶ 240, 248 (“If firms were to aggregate sufficient amounts of spectrum, it is possible that they could unilaterally or in combination exclude efficient competitors, reduce the quantity of service available to the public, and increase prices to the detriment of consumers.”).

<sup>40/</sup> See *AT&T/Qualcomm Order* ¶ 45; *Fifteenth Report* ¶ 288 (Tables 27-28).

In connection with auctions for new spectrum below 1 GHz, the Commission would impose a cap on the total amount of sub-1 GHz spectrum a bidder could hold in a market. A carrier that fails to satisfy the below 1 GHz cap in a geographic area would be precluded, in that auction, from acquiring new spectrum in that geographic area. A cap on spectrum below 1 GHz is particularly important to give carriers certainty as additional below 1 GHz spectrum is made available through the incentive auction contemplated by the Spectrum Act.<sup>41/</sup> A bright-line cap for auctions of spectrum below 1 GHz will allow carriers seeking to obtain spectrum in the incentive auction to determine early in the process how much spectrum they can acquire and where, develop their auction and business strategies within that framework, and make the arrangements necessary to secure sufficient funding to support those strategies. Indeed, as the Commission notes, “[b]right-line limits might encourage auction participation . . . by affording parties greater certainty and predictability to develop their business plans and obtain necessary financing.”<sup>42/</sup>

In transactions, the Commission would take an analogous approach but with a spectrum screen. In transactions involving the acquisition of spectrum below 1 GHz, in addition to a review of the carrier’s total spectrum holdings in a market, the Commission would analyze the carrier’s spectrum below 1 GHz in that market using the one-third spectrum screen. The Commission has recognized that “[t]wo licensees may hold equal quantities of bandwidth but nevertheless hold very different spectrum assets.”<sup>43/</sup> The evaluation of spectrum below 1 GHz

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<sup>41/</sup> See 47 U.S.C. § 1401 *et seq.*

<sup>42/</sup> *NPRM* ¶ 20. Parties could seek a waiver of the cap consistent with the Commission’s general practice to accommodate unique circumstances. A cap for spectrum below 1 GHz with the opportunity for a waiver will provide the Commission with flexibility while also ensuring that entities that already hold a significant percentage of the spectrum below 1 GHz will not be able to increase their spectrum concentration and foreclose competition.

<sup>43/</sup> *Fifteenth Report* ¶ 290.

separately, whether through a cap in auctions or a case-by-case analysis in transactions, reflects this recognition by accounting for the enhanced value of sub-1 GHz spectrum.<sup>44/</sup>

#### **IV. CONCLUSION**

As the Commission takes a fresh look at its mobile spectrum holdings policies, it has an opportunity to better align its rules and regulations to reflect the current wireless landscape. The mobile industry is facing a rapidly increasing demand by consumers for data-intensive services that require large amounts of spectrum. For carriers to compete effectively, they must have efficient and equitable access to critical spectrum resources through both auctions and secondary market transactions. In the case of auctions, the most effective way the Commission can achieve this is by instituting bright-line spectrum caps on spectrum holdings in a market. With respect to secondary market transactions, the Commission should continue using its case-by-case approach, including a spectrum screen. In either case, the Commission must recognize that not all spectrum bands are equal and separately evaluate holdings below 1 GHz. Such action will ensure that all providers have reasonable access to valuable spectrum resources necessary to compete.

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<sup>44/</sup> See *NPRM* ¶ 37 (noting that T-Mobile has proposed consideration of the relative value of each band in case-by-case analyses); see also Comments of T-Mobile USA, Inc., WT Docket No. 11-186 (filed April 13, 2012).

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