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Stifling the Spectrum Market: The Negative Implications of the AT&T/Qualcomm Order

by

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On December 22, 2011, the FCC released its AT&T/Qualcomm Order. Coming just a few weeks after release of the FCC's staff report opposing AT&T's proposed merger with T-Mobile, the AT&T/Qualcomm Order reached a different result: the FCC approved AT&T's purchase of Qualcomm's 700MHz spectrum licenses, subject to certain conditions.

Because the AT&T/Qualcomm Order was released near the end of the calendar year and in the wake of the FCC's staff report opposing AT&T/T-Mobile, it might be easily overlooked. This would be a mistake. The order's flawed analytical approach to wireless competition and its unsound rationale for imposing regulatory conditions deserve a close – and critical – look.

The FCC's competition analysis and regulatory policies have implications for all wireless services, not just for the parties to any particular merger. And despite the bottom-line outcome in AT&T/Qualcomm, the order's analysis and reasoning are heavily influenced by static market considerations. Under this problematic analytical approach, the dynamic conditions that characterize the wireless marketplace – and that are more congenial to continued reliance on free market forces – are downplayed or largely ignored.

The order built upon the static emphasis of prior FCC reports and orders, this time with an important wrinkle. Without justification, or a principled analysis, it singled out lower-band spectrum for special scrutiny and as the basis for regulatory conditions on spectrum license use.

As the latest iteration of the FCC's static approach to wireless competition, the AT&T/Qualcomm Order suggests that in the year ahead wireless mergers may be subject to increasingly heavy regulatory conditions. If so, this would undermine ongoing efforts to promote a vibrant secondary market for flexible use spectrum. As a result, wireless providers would face added difficulties in increasing network efficiency to better satisfy spiking wireless data traffic demand.

A renewed emphasis on the forces of innovation and disruptive change that characterize the wireless market is now needed. This includes a commitment to pursuing policies promoting flexibility in spectrum use and easing the exchange of spectrum in secondary market transactions.

For future FCC merger reviews involving transfers of wireless spectrum licenses, this means regional and local wireless providers, as well as cross-platform substitutes such as wireline and fixed mobile Wi-Fi hotspot technologies, should factor into the agency's analysis. Market concentration estimates may be factors to consider as well. But the FCC must not manipulate its review standards through *ad hoc* adjustments that move the analytical goalposts in a way that undermines the integrity of the process.

The FCC should follow through on the National Broadband Plan's recommendation that it pursue policies that allow flexibility of spectrum use. It should ensure predictability in its review process and eschew regulatory conditions based on fuzzy standards. Likewise, the FCC should avoid setting agency precedents that create regulatory uncertainty. A lack of certainty undermines incentives for wireless providers to obtain and invest in spectrum through secondary market transactions.

The FCC's review of future transactions involving spectrum licenses, such as Verizon/SpectrumCo, should be based on a predictable and principled process that eschews imposition of conditions that are not strictly related to demonstrated consumer harm created by the specific transaction. Future FCC reviews must focus on the wireless sector's dynamic market conditions and the prospects for continuing investment and disruptive changes that are responsive to consumer demand.

The FCC's Order Repeats a Static-Minded Market Analysis

Despite the rapid, disruptive changes that have characterized the wireless market over the last several years, static market considerations dominate the wireless competition analysis contained in the AT&T/Qualcomm Order.[1]

Following the pattern set in several recent agency reports,[2] the FCC's consideration of the mobile broadband services market excluded competitive effects posed by wireline broadband coupled with fixed mobile options like Wi-Fi hotspot roaming. In fact, the order is devoid of any intermodal or cross-platform competition assessment whatever. The FCC insisted that no party to the proceeding suggested a different set of market definitions to guide its analysis.[3]

The FCC's order further narrowed its market analytical focus by dismissing the competitive effects of local competition by smaller wireless carriers.[4] This means dismissing regional wireless carriers marketing 3G and even 4G LTE wireless services, often priced competitively or at a discount compared to major wireless carriers. Regional carriers' wireless service offerings typically include unlimited bucket plans for voice, video, and data use when local, and provide out-of-territory coverage through roaming.

More significant is the order's emphasis on static concerns, despite the seemingly positive results of the deal according to the FCC's own static indicators. AT&T/Qualcomm passed both of the static market tests that the FCC has recently emphasized in analyzing the wireless market – namely, Herfindahl-Hirschman Index (HHI) market concentration estimates and the agency's spectrum screen.[5] AT&T's proposed purchase of Qualcomm spectrum licenses would *not* result in any reduction in the number of national or local competing wireless providers. The FCC therefore acknowledged that HHI market concentration estimates were irrelevant to the analysis.[6] Likewise, the FCC concluded that "under any version of the overall spectrum screen relatively few, or no, local markets are triggered for further competitive analysis."[7]

Conceptual Downsides to the FCC's Spectrum Band Discrimination

With AT&T/Qualcomm passing both its HHI and spectrum screen criteria, the order added a new twist. The FCC tacked on to its analysis a *de facto* spectrum sub-screen. That is, the FCC narrowed its analytical focus from all "suitable" and "available" spectrum for mobile voice and wireless broadband to suitable and available spectrum *below 1 GHz*.[8]

In so doing, the FCC assumed that "low-band" spectrum – such as the 700MHz spectrum licenses at issue in AT&T/Qualcomm – are superior to above 1GHz or "high-band" spectrum for delivering wireless broadband services. The order contended that low-band spectrum enables broader deployment of wireless networks at reduced costs to carriers, justifying a separate analytical focus on that part of the spectrum.[9]

The disparate regulatory treatment by the FCC is hardly justified. For starters, any cost savings to carriers arising from the unique characteristics of low-band spectrum would be factored into the market price for the spectrum licenses. Low-band spectrum offering cost efficiencies would come at a premium. And high-band spectrum requiring comparatively higher deployment investment would come at a discount.

The sorting out of near-term versus long-term deployment efficiencies should be left to the price system. For spectrum licenses exchanged through auctions this means winning bid amounts. And for secondary market transactions it means bargained for sale amounts. But for purposes of the order, at least, the FCC presumed to decide these economic and engineering matters itself and, consequently, for the parties to the deal. As will be discussed below, the FCC's conclusions in this regard formed part of the basis for its imposition of regulatory conditions on AT&T/Qualcomm.

Moreover, wireless network coverage considerations do not by themselves justify disparate treatment of spectrum. Capacity constraints are also important. As the FCC itself acknowledged in its wireless competition reports, high-band spectrum has arguably better prospects for offering high-capacity service.[10] In its reports, the FCC has also pointed out the potential benefits from carriers using a mix of low-band and high-band spectrum to successfully meet wireless network traffic demands.[11]

One may debate the relative merits of low-band or high-band spectrum from a technical engineering standpoint. Yet those judgments and trade-off considerations should be made by wireless carriers that are actually in the business of using that spectrum for providing wireless services.

It's also worth observing that in prior merger reviews the FCC seemed to understand the importance of refraining from discriminating between spectrum bands as a matter of regulatory policy. In its Sprint/Clearwire Order, for instance, the FCC refused to treat different bands of spectrum differently in its market analysis.[12] But the AT&T/Qualcomm order indicates a reversal of course for the FCC that is heavy with regulatory implications.

The FCC's Order Thinly-Supported Regulatory Conditions

The order concluded that AT&T/Qualcomm raises competitive concerns because the transaction would result in AT&T holding a significant portion of available low-band spectrum "that has technical attributes important for other competitors to meaningfully expand their provision of mobile broadband services or for new entrants to have a potentially significant impact on competition."[13] In other words, the FCC zeroed in on low-band spectrum and essentially declared that it can conceive of possible worlds in which competing providers or new entrants might instead acquire such spectrum and thereby create a more competitive environment than in the actual world.

This suggests the FCC considers regulatory restraints on incumbents justified by little more than imagining additional competitors that might (in theory, but not in fact) raise and risk their own capital for necessary inputs to expand market share or gain entry. But this approach stretches the FCC's "public interest" standard for reviewing wireless transactions beyond any meaningful boundaries. And combined with its dismissal of competition from regional wireless providers and a narrow focus on low-band spectrum, this "standardless" interpretation of its public interest standard supplied the FCC's rationale for imposing regulatory conditions on AT&T/Qualcomm.

To mitigate its competitive concerns about AT&T/Qualcomm, the FCC conditioned its approval of the deal in ways that reduce the flexible use of the spectrum at issue. AT&T stated that its intended use for Qualcomm's 700MHz spectrum licenses was for pairing with its other spectrum holdings, including AWS spectrum, for downlink transmissions. The order froze that use into a mandate. The order requires that AT&T may "use this spectrum only for downlink transmissions" and "may not use these licenses for uplink transmissions."[14]

In a *de facto* extension of its data roaming rules, the FCC also required that AT&T only pair the acquired spectrum with its existing spectrum, such as AWS-1 spectrum, in a way that will allow data roaming by competitors offering wireless service on AWS-1. As the order reads: "AT&T may not incorporate the Qualcomm spectrum into its network in such a way as to preclude roaming by a provider that otherwise supports the same primary spectrum, e.g., AWS, Cellular, or PCS, but does not support the supplemental downlink technology."[15]

This latter condition may seem inconsequential in light of the FCC's existing data roaming rules. But it amounts to an agency mandate on the use of technology in an innovative and competitive market characterized by rapid change. Such a condition poses a potential barrier to future network experimentation to obtain improved efficiencies and superior performance in the face of growing wireless traffic demands and spectrum capacity constraints. It also raises questions about regulatory mission creep – again, in the absence of market failure or consumer harm – over a wireless industry that was once said to be subject to only light-touch regulatory treatment.

Finally, the FCC also subjected AT&T/Qualcomm to some signal interference conditions.[16] Arguably, those conditions touched on matters of industry-wide concern that were more fitting for rulemaking proceedings rather than merger or transaction reviews. But even if one regards the particular interference and downlink conditions imposed in the order as trivial, the FCC nonetheless set a precedent with unfortunate implications for wireless services.

Conditions Restricting Spectrum Use Harm Secondary Spectrum Markets

The ready willingness of the FCC to impose extra regulatory conditions on the use of spectrum licenses in a competitive market and on transactions presenting important economic benefits increases uncertainties for wireless carriers. After AT&T/Qualcomm, wireless carriers have more reason to expect that the spectrum they seek to acquire through prospective mergers or other transactions will be subjected to a set of unforeseeable regulatory conditions. This unpredictability makes pricing decisions more difficult and risky, therefore diminishing wireless investment incentives.

Making spectrum use more flexible was the ostensible goal of the National Broadband

Plan. The Plan declared that "[t]he goal of the FCC's current secondary market policies is to eliminate regulatory barriers that might hinder access to, and permit more efficient use of, valuable spectrum resources."[17] And it recommended policies that would "promote access to unused and underutilized spectrum."[18] But *ad hoc* regulatory restrictions on the use of spectrum, particularly in the case of transactions that pose no threat of consumer harm, or even reduce the number of existing competitors, have a chilling effect on the functioning of the secondary market. Regulatory uncertainty hampers the ability of the limited spectrum market that now exists to facilitate efficiency-enhancing exchanges that will put spectrum to its highest commercial use. Improved spectral and network efficiencies are essential for wireless providers facing surging wireless traffic demands and what the FCC has repeatedly recognized is a nearing spectrum crunch.[19]

Other wireless spectrum transactions are now before FCC, such as Verizon/SpectrumCo, Verizon/Cox, and Verizon/Leap. Like AT&T/Qualcomm, none of these transactions involve the elimination of existing wireless providers. Instead, they would either put spectrum into use for wireless services or swap spectrum licenses for more efficient use. But even if spectrum screen threshholds aren't triggered under the current screen by Verizon/SpectrumCo or by the other pending transactions, AT&T/Qualcomm is troublesome to the extent it suggests the deals may face less-than-hospitable scrutiny by the FCC.

The AT&T/Qualcomm order suggests that in future spectrum license transactions the agency may rely again on other static influences and a spectrum sub-screen to rationalize the imposition of regulatory conditions on the use of the spectrum. Again, this means imposing regulatory conditions even in the absence of market failure or consumer harm, HHI or spectrum screen triggers.

One hint for this may be the AT&T/Qualcomm Order's admission that the agency may alter its spectrum screen thresholds in the near future. The order seems to contemplate a future reduction, for the first time, in the overall amount of spectrum it considers suitable and available.[20] This would mean lower spectrum screen thresholds for triggering added FCC scrutiny, and, therefore, it would render regulatory conditions on spectrum acquisitions more likely.

Renewing the Call for a Dynamic-Minded FCC Review Process

The wireless marketplace is characterized by the forces of rapid, innovative, disruptive change. Flexible-use spectrum licenses are crucial to ensuring that those forces continue to operate. The FCC should consider mergers and other transactions involving wireless providers and spectrum licenses in light of these dynamic market realities rather than merely static concerns.

This means taking stock of competition and potential competition by regional and local wireless providers, as well as the competitive effects of cross-platform substitute technologies. It also means that while static HHI and spectrum aggregation estimates may be factors for the FCC to consider, they are certainly not the be-all and end-all. And the FCC must not manipulate its review standards through *ad hoc* adjustments or changes that single out slices of the spectrum for special scrutiny and regulatory conditioning.

Regulatory predictability and certainty need to be restored to the FCC's merger review process. A more predictable and certain process will better incentivize wireless providers to engage in efficient and output-enhancing market transactions for spectrum licenses. Verizon's plans to acquire additional spectrum offer a number of potential public benefits by enabling a more rapid and expensive build-out of its 4G LTE services. Accordingly, the FCC's analysis of the Verizon/SpectrumCo and other future proposed deals must focus on whether market conditions will continue to promote investment and disruptive changes to set the stage for the next wave of wireless. The FCC also needs to ensure that spectrum can be used flexibly. But if the FCC continues down the same rigidly static analytic path evident in its staff report against AT&T/T-Mobile or its AT&T/Qualcomm Order, the FCC will diminish wireless consumer welfare.

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[1] Order, *In re* Application of AT&T and Qualcomm Incorp. For Consent To Assign Leases and Authorizations ("AT&T/Qualcomm Order"), WT Docket No. 11-18, 2011 FCC LEXIS 5262 (Dec. 22, 2011).

[2] *See, e.g.,* Staff Analysis and Findings ("FCC Staff Report"), *In re* Applications of AT&T Inc. and Deutsche Telekom AG for Consent to Assign or Transfer Control of License and Authorizations, WTB Docket No. 11-65, 2011 FCC LEXIS 4919, at ¶ 31 (November 29, 2011); *In re* 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 F.C.C.R. 9664, at ¶¶ 365-367 (June 24, 2011). For a critique of the FCC Staff Report's emphasis on market concentration and dismissal of cross-platform competitive effects, *see* Randolph J. May and Seth L. Cooper, "The FCC Staff's Report Against the AT&T/T-Mobile Merger: A Critical Analysis," *Perspectives from FSF Scholars*, Vol. 6, No. 32 (December 20, 2011), available at: http://www.freestatefoundation.org/images/The_FCC_Staff_s_Report_Against_the_AT_T--T-Mobile_Merger_-_A_Critical_Analysis_122011.pdf. For a similar critique of the FCC's *Fifteenth Report*, *see* Seth L. Cooper, "Seeing Competition, Eyeing Regulation: FCC Wireless Policy Following the Fifteenth Report," 20 *CommLaw Conspectus* 41 (2011).

[3] AT&T/Qualcomm Order, at ¶ 33.

[4] *Id.* at ¶¶ 33-37.

[5] *See, e.g*., FCC Staff Report, at ¶¶ 43-45.

[6] AT&T/Qualcomm Order, at ¶ 29, ¶ 31 n.91.

[7] *Id.* at ¶ 41.

[8] *Id.* at ¶¶ 38-39; compare *id.* at ¶¶ 48-49.

[9] *Id.* at ¶¶ 49-51.

[10] *See, e.g., In re* 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, *Fourteenth Report*, 25 F.C.C.R. 11407, at ¶ 272 (May 20, 2010).

[11] *See, e.g., id. at* ¶ 273.

[12] *In re* Sprint Nextel Corp. and Clearwire Corp. Applications For Consent To Transfer Control of Licenses, Leases, and Authorizations ("Sprint/Clearwire Order"), WT Docket No. 08-94, 23 FCC Rcd 17570, at ¶ 63 (Nov. 7, 2008).

[13] AT&T/Qualcomm Order, at ¶ 51.

[14] *Id.* at ¶ 65, ¶ 61.

[15] *Id.* at ¶ 57.

[16] *See id.* at ¶¶ 66-68.

[17] Connecting America: The National Broadband Plan, at 83 (Recommendation 5.7).

[18] *Id.*

[19] *See, e.g.*, FCC Staff Technical Paper: Mobile Broadband: The Benefits of Additional Spectrum (October 2010).

[20] AT&T/Qualcomm Order, at ¶ 42.