

**B. A More Accurate Analysis of the Relative Value of AT&T's Spectrum Holdings Raises Even More Grave Concerns Regarding the Proposed Merger.**

Finally, even these calculations fail to account for the relative value of the spectrum licenses. AT&T and Verizon Wireless hold a disproportionate share of so-called “beachfront spectrum,” which far exceeds other spectrum in utility and value. Spectrum below 1 GHz is considered “beachfront” because low frequencies have better propagation characteristics — mobile networks built on such spectrum can manage far better coverage and penetration than identical networks using higher frequency spectrum.<sup>148</sup> Accordingly, it comes as no surprise that beachfront spectrum has commanded the highest prices in recent auctions.<sup>149</sup> There are three bands of spectrum used for mobile broadband below 1 GHz — the cellular band, consisting of approximately 50 MHz in population-weighted average licenses; the 700 MHz band, approximately 70 MHz; and the SMR band, 19 MHz. Sprint holds the vast majority of the small SMR band.<sup>150</sup> AT&T currently holds 42.3 percent of cellular band licenses, and Verizon Wireless holds 48.5 percent; the companies together hold over 90 percent.<sup>151</sup> Verizon Wireless holds 42.7 percent of 700 MHz spectrum licenses, and AT&T currently holds 24.3 percent<sup>152</sup> — and would hold more than 33 percent after acquiring the licenses currently held by Qualcomm.

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<sup>148</sup> See *Fourteenth Report*, ¶ 269.

<sup>149</sup> *Id.*, ¶ 271 (“The higher value that many providers have placed on low-band spectrum with respect to the provision of mobile service — especially mobile broadband service — is demonstrated by a comparison of market valuations. . . . In the 2008 auction of 700 MHz spectrum, the average price for the 700 MHz spectrum was \$1.28 per MHz-pop. This unit price was more than twice the average price of \$0.54 per MHz-pop for AWS spectrum auctioned in 2006.”).

<sup>150</sup> *Id.* at ¶ 275.

<sup>151</sup> *Id.*

<sup>152</sup> *Id.*

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Clearly, other than the large holdings of AT&T and Verizon Wireless and the smaller holdings of Sprint, there is no remaining room in beachfront spectrum for any significant competitors.

Throughout the country and particularly in prime spectrum bands, a merged AT&T and T-Mobile would maintain problematically dominant spectrum positions. If spectrum policy is to have any meaningful value in promoting competition, the Commission must block this merger, as it would result in excessive concentration in spectrum ownership.

**C. AT&T and T-Mobile Exaggerate the Imagined Benefits of the Merger and Fail to Prove Those Benefits Would Not Otherwise Accrue Even If the Commission Rejects the Transaction.**

In arguing that this merger would confer public interest benefits, Applicants rely primarily on arguments that the merger would alleviate capacity constraints and accelerate deployment of LTE technology. Applicants overstate both of these supposed public interest benefits. Moreover, the Commission should disregard both of these benefits when conducting its public interest analysis because neither benefit is cognizable under the Commission's precedents. The Commission includes a claimed benefit in its merger analysis only if the claimed benefit is "transaction- or merger-specific."<sup>153</sup> That is, the claimed benefit "must be likely to be accomplished as a result of the merger but unlikely to be realized by other means that entail fewer anticompetitive effects."<sup>154</sup> The proposed benefits — alleviating capacity constraints and speeding deployment of faster networks — fail to meet this criterion.

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<sup>153</sup> *AT&T, Inc. and Bell South Corp.*, WC Docket No. 06-74, Application for Transfer of Control, 22 FCC Rcd. 5662, ¶ 202 (2006).

<sup>154</sup> *Id.*

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**i. The proposed merger will do little to alleviate capacity constraints in current networks.**

Invoking the bogeyman of limited capacity, Applicants claim that merging the two companies would result in better service for consumers.<sup>155</sup> The application insists that “AT&T’s network-capacity challenges... are not just ‘looming’ a few years down the road — they are here today.”<sup>156</sup> In fact, the combination of AT&T’s strained network with T-Mobile’s strained network would not create significant benefits in the short or long term. AT&T and T-Mobile both currently operate two different networks, a “2G” network using GSM technology, and a network using HSPA technology,<sup>157</sup> sometimes referred to as “3G” and sometimes as “4G.” A different network standard, LTE, is also referred to as “4G”, but neither AT&T nor T-Mobile has yet deployed any LTE services.

Applicants have asserted the potential for billions of dollars in financial savings as a result of “synergies” in the existing networks<sup>158</sup> — but the numbers do not seem to add up. The only clear “synergy” in the companies’ spectrum holdings lies in their shared use of 2G GSM technology on partially overlapping spectrum bands.<sup>159</sup> Their HSPA networks are deployed on different spectrum, and any combination thereof — including a combination to free up spectrum to create “synergies” for future LTE networks — would require extensive equipment and handset replacements.

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<sup>155</sup> *E.g.*, *AT&T-T-Mobile Application* at 42.

<sup>156</sup> *Id.* at 26.

<sup>157</sup> *Id.* at 7.

<sup>158</sup> *Id.* at 19 (discussing “tens of billions of dollars in overall cost synergies”).

<sup>159</sup> *See id.* at 33 (presenting a chart with ‘X’ marks for network deployment by technology and spectrum band, in which the only overlap between AT&T and T-Mobile is a shared ‘X’ under ‘GSM’ and for ‘1900 MHz’, with AT&T also using 850 MHz spectrum for GSM).

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*Proposed benefits for subscribers to the 2G GSM network*

The *only possible* efficiency benefits attributable to this merger apply to 2G GSM networks, which have been outdated for many years. By definition, these benefits have a limited shelf life because AT&T plans to move its users off of 2G GSM networks over time.<sup>160</sup> And even those benefits are extremely limited because all of the users of both networks will use the combined network. As former FCC chief economist and frequent AT&T consultant Gerald Faulhaber says, “Putting the two networks together does not create spectrum.”<sup>161</sup>

A significant portion of the alleged GSM synergies arise from the ability of a merged AT&T and T-Mobile to remove one GSM control channel.<sup>162</sup> Although control channels do represent potential inefficiencies in spectrum utilization, Applicants fail to show any specific details demonstrating that the control channels used by the two companies are different or redundant, or otherwise can be combined in an integrated network to reduce the inefficiency. Furthermore, AT&T’s and T-Mobile’s GSM networks are primarily used for voice and not data, because the fastest data rates available on these networks are extremely low.<sup>163</sup> Consolidating control channels to make more spectrum available for communications would therefore have

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<sup>160</sup> See *AT&T-T-Mobile Application*, Hogg Declaration, ¶ 5 (“[AT&T’s GSM] customers will migrate over time to more spectrally efficient UMTS and/or LTE services. . . .”) (Hogg Declaration).

<sup>161</sup> See, e.g., Spencer E. Ante and Amy Schatz, “Skepticism Greets AT&T Theory,” *Wall*

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little financial value for so long as the spectrum is used for GSM — and converting it to use for newer technologies would render moot any arguments of efficiency in GSM control channels.

Applicants offer no more convincing an argument for other supposed GSM efficiencies if their own assertions of network constraints are to be believed. Applicants raise the possibility of “channel pooling efficiencies” which they allege can be used to reduce network delays and congestion just by merging the loads and the resources of both companies. They assert “initial analysis” suggests that they can achieve 10-15% capacity gains through such pooling without providing that analysis.<sup>164</sup> Instead, they offer a metaphor to explain the benefits. According to applicants, pooling channels is like combining two ticket lines, each with two ticket agents, into a single line with four agents.<sup>165</sup> The combined line is more efficient because it is not empty unless there are no customers, whereas with two lines, one line could be empty and not serving customers while the other is overfull.<sup>166</sup> Fundamentally, this metaphor falls apart under an assumption of heavy load. If every ticket line is full of people all the time, whether there’s one line with four agents or two lines with two agents each won’t make any difference, because each of the agents will be working, all the time. As Applicants insist that their 2G GSM networks are already in or near a state of crisis due to capacity constraints,<sup>167</sup> channel pooling efficiencies seem unlikely to deliver any significant benefits. Yet, applicants insist that the efficiencies “are independent of, and unaffected by, the load levels on the networks being combined.”<sup>168</sup> At best,

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<sup>164</sup> Hogg Declaration, ¶ 50.

<sup>165</sup> *Id.*, ¶ 51.

<sup>166</sup> *Id.*

<sup>167</sup> *AT&T-T-Mobile Application* at 26.

<sup>168</sup> Hogg Declaration, ¶ 52.

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the asserted efficiencies from channel pooling are unproven; more likely, they are not significant or nonexistent.

The clearest benefits for 2G GSM subscribers arise in the asserted utilization efficiencies,<sup>169</sup> but even these benefits are highly limited. In those areas where one company has a heavily constrained GSM network and the other company has an underutilized GSM network, then the combination of those two networks would indeed improve service for the subscribers of one company. However, one subscriber's benefit might be another subscriber's detriment, as the lighter loaded network would become more heavily loaded as a result of the combination. The exact amount of improvement for a constrained network in an area and the amount of degradation for the other network would depend heavily on the relative degrees of utilization. Any benefits would only occur in areas that fit a pattern of unbalanced use. The identification of a few such areas, as provided in the application,<sup>170</sup> does not itself amount to a showing of substantial benefit for a significant number of customers nationwide. Overall, the asserted benefits for the companies' 2G GSM networks appear speculative and limited, despite the overlap in spectrum and technology usage.

*Proposed benefits for subscribers to the HSPA network*

Nor will combining lead to significant HSPA network improvements. If anything, Applicants' claims regarding the efficiencies to be achieved in the delivery of HSPA service should cause even more skepticism. Because AT&T currently deploys HSPA technology on cellular and PCS spectrum and T-Mobile deploys HSPA on AWS spectrum, the two companies' networks cannot be rapidly combined to achieve efficiency gains. Applicants make clear their

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<sup>169</sup> *Id.*, ¶ 54.

<sup>170</sup> *Id.*

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intention to achieve improvements in their allegedly constrained HSPA network by repurposing some spectrum currently deployed as GSM.<sup>171</sup> The application again offers a broken metaphor rather than a detailed explanation of the efficiencies. The proffered metaphor alleges that the companies' GSM networks are like two separate bottles of water, one 80% full and one 10% full, and that the load of both networks can easily be combined into the resources of one.<sup>172</sup> But if the networks are as heavily loaded as applicants would have us believe, combining them would seem to be more like pouring one 70% water bottle into another 90% full bottle. The result would be a lot of water spilled on the ground, or in the real world, one overwhelmed and overloaded GSM network with even poorer service than either original network. Given the assertions from applicants that their GSM networks are already constrained, combining the two networks will make the networks far worse, not better.

Applicants then argue that the spectrum used for one of the two GSM networks (presumably T-Mobile's PCS spectrum) can be repurposed to hold HSPA traffic (presumably T-Mobile's HSPA traffic, currently carried on T-Mobile's AWS spectrum) — after a full consolidation of the GSM networks.<sup>173</sup> But there are significant and unstated costs in such a transition. T-Mobile's HSPA network was built to work on AWS spectrum, not PCS, and all of

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<sup>171</sup> See *id.*, ¶¶ 42, 49, 53-55. At times, Applicants also assert that freed GSM control channels can be used for UMTS/HSPA traffic. *Id.*, ¶ 48. However, these benefits are limited only to places where AT&T has 5 MHz of spectrum already available, the available spectrum is sufficiently located that it can be paired with the 5 MHz freed by the control channel into a downlink and uplink pair, and such engineering would not create any interference concerns. Consequently, the benefits seem minimal at best.

<sup>172</sup> *Id.*, ¶ 55.

<sup>173</sup> *Id.*

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T-Mobile's infrastructure would be updated to use PCS. Furthermore, *every T-Mobile HSPA handset* currently in the hands of consumers would need to be replaced.

**ii. The proposed merger will not significantly improve future LTE deployments, and any improvements would come at great cost.**

Applicants' argue that AT&T's current 700 MHz and AWS spectrum holdings cannot fully support its LTE deployment, but the Commission should view this claim with skepticism. The company already has a nationwide average of 27 MHz of 700 MHz and AWS spectrum for LTE deployment.<sup>174</sup> Adding Qualcomm's spectrum would give the company a nationwide average of approximately 35 MHz for LTE, with a minimum of 6 MHz of spectrum covering 300 million people.<sup>175</sup> However, these holdings are allegedly insufficient because AT&T claims it needs 20 MHz of *contiguous* spectrum nationwide for its LTE services to be sufficiently robust.<sup>176</sup> Consequently, applicants plan to clear and repurpose the AWS spectrum currently used for T-Mobile's HSPA network to supplement AT&T's holdings and create a minimum of 20

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<sup>174</sup> *AT & T Mobility Spectrum LLC and Qualcomm Incorporated Seek FCC Consent to the Assignment of Lower 700 MHz Band Licenses*, WT Docket No. 11-18, Application, Description of Transaction, Public Interest Statement, and Related Demonstrations, Jan. 13, 2011 (*AT&T-Qualcomm Application*), Rinne Declaration, ¶ 12 (Rinne Declaration).

<sup>175</sup> See, e.g., Greg Bensinger and Brett Pulley, "AT&T to Pay \$1.93 Billion for Qualcomm Mobile Spectrum," *Bloomberg*, Dec. 20, 2010, available at <http://www.bloomberg.com/news/2010-12-20/at-t-agrees-to-acquire-wireless-licenses-from-qualcomm-for-1-93-billion.html> ("The spectrum, in the lower 700 megahertz frequency band, covers 300 million people in the U.S., the companies said today in a statement."). Based on a current population estimate of approximately 311 million as of May 2011, the Qualcomm spectrum would allow the company to cover at least 96% of the population of the United States, and likely already more than AT&T's 97% target threshold.

<sup>176</sup> *AT&T-T-Mobile Application at 5*; see also Hogg Declaration at ¶ 60 (noting that "T-Mobile USA's AWS spectrum will provide the combined company with at least an average of 20 MHz of AWS spectrum" in areas where AT&T currently lacks adequate AWS or 700 MHz spectrum).

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MHz of spectrum for LTE nationwide.<sup>177</sup> According to AT&T's own prior arguments, this is a solution without a problem, despite the company's newfound 20 MHz AWS requirement. Furthermore, the "solution" would be actively harmful to current AT&T and T-Mobile customers.

AT&T has given numerous signals that it has adequate spectrum already to deploy LTE nationwide. Most prominently, in the parallel AT&T/Qualcomm proceeding, the application and alleged public interest showing contend that AT&T could transition its PCS or cellular spectrum licenses to use for LTE in areas where the company lacks adequate 700 MHz or AWS spectrum licenses.<sup>178</sup> Furthermore, the company's threshold of 20 MHz is set far too high. MetroPCS, AT&T's supposed competitor,<sup>179</sup> is currently deploying LTE in many areas on a scant 10 MHz of spectrum, often broken into 2 paired 5 MHz channels.<sup>180</sup> If MetroPCS can be considered a competitor with 10 MHz of spectrum for LTE, AT&T cannot logically insist on 20.

Certainly, putting additional spectrum into use for an LTE network would improve the network's overall performance. However, repurposing T-Mobile's AWS spectrum, as applicants have planned, would come at great cost, if it is feasible at all. T-Mobile's HSPA users would need to be moved off of the AWS spectrum and onto AT&T's cellular and PCS spectrum

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<sup>177</sup> *Id.*

<sup>178</sup> Rinne Declaration, ¶ 15 ("Where AT&T currently does not hold 700 MHz or AWS spectrum, AT&T may take steps to clear a portion of its 850 MHz or 1900 MHz spectrum for LTE, as customers begin transitioning to LTE devices.").

<sup>179</sup> See, e.g., *AT&T-T-Mobile Application* at 82-86 (arguing that MetroPCS is "taking an 'increasing percentage' of subscribers . . . prompting other major providers, including AT&T, to make competitive responses.").

<sup>180</sup> See, e.g., Harish Vadada, "MetroPCS — first LTE network in the US," *Telecom Cloud*, Aug. 29, 2010, available at <http://www.telecom-cloud.net/?p=408>.

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licenses.<sup>181</sup> Such a transition seems nearly impossible when, according to applicants, AT&T is already experiencing significant network capacity constraints.<sup>182</sup> At minimum, the short-term impact of the merger under such a plan would be a significant worsening of any capacity constraints currently affecting both AT&T's and T-Mobile's networks as the two are temporarily combined onto AT&T's spectrum resources.

**D. Both AT&T and T-Mobile Could Alleviate Any Capacity Constraints and Improve Next Generation Deployment Without Resort to a Merger.**

Applicants fail to demonstrate that combining their spectrum holdings is the only, or the best, way to mitigate capacity constraints and to improve LTE deployment. From the outset, the merger appears unnecessary in light of actual examples of more efficient providers. AT&T's closest competitor, Verizon Wireless, handles more customers and has deployed robust LTE services using equivalent total spectrum.<sup>183</sup> Verizon Wireless shares its spectrum across multiple generations of network technology like AT&T, and yet it maintains that its network and spectrum position is strong and will be for many years.<sup>184</sup> Applicants have not clearly explained why Verizon Wireless is able to avoid similar constraints, or why AT&T cannot achieve the same efficiencies with its existing resources.

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<sup>181</sup> The application asserts that there are "some areas" in which T-Mobile holds AWS spectrum that the company does not currently use. Hogg Declaration, ¶ 56. Presumably, this spectrum could be deployed for LTE service without transition cost. However, the full scope and bandwidth of available spectrum is uncertain, and most of T-Mobile's AWS spectrum is currently in use.

<sup>182</sup> See, e.g. *AT&T-T-Mobile Application* at 26.

<sup>183</sup> According to the Commission's *Fourteenth Report*, Verizon Wireless had just over 91 million subscribers at year-end 2009, and AT&T had just over 85 million. *Fourteenth Report* at 9. Verizon Wireless currently holds 87.7 MHz of average spectrum, measured on a population-weighted nationwide basis; in the same source, AT&T currently holds 82 MHz of spectrum, within 10% of the holdings of Verizon Wireless (and would hold more than Verizon Wireless if the Qualcomm acquisition is approved). *Id.* at 148, table 26.

<sup>184</sup> E.g., *AT&T-T-Mobile Application* at 79.

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In fact, AT&T has better alternatives than this merger to improve its network. AT&T is currently sitting on \$9 billion in undeployed beachfront and AWS spectrum.<sup>185</sup> AT&T holds enormous and valuable undeployed spectrum licenses, including a population-weighted national average of 17 MHz in beachfront 700 MHz licenses, far more than many other carriers such as MetroPCS possess in total.<sup>186</sup> A more efficient, fast, and lower cost approach to alleviating AT&T's alleged capacity constraints on both its GSM and HSPA networks would be for AT&T to spend the \$24 billion in cash it has committed for T-Mobile on rapidly deploying its current unused spectrum towards its LTE network, entering into roaming agreements or making smaller acquisitions<sup>187</sup> to cover gaps in its territory, generating incentives for some of its current users to rapidly transition from GSM and HSPA networks to LTE, and easing the load on the remaining GSM and HSPA subscribers. Applicants argue that a transition of AT&T users from GSM and HSPA to LTE will take a long time,<sup>188</sup> yet their proposal requires a complete transition of T-Mobile's users.<sup>189</sup> The primary difference appears to be whether T-Mobile's customers or

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<sup>185</sup> E.g. Reply of Free Press, Public Knowledge, Media Access Project, Consumers Union, and the Open Technology Initiative of the New America Foundation to Joint Opposition, *In re Applications of AT&T Mobility Spectrum LLC and Qualcomm Incorporated for Consent to the Assignment of Lower 700 MHz Band Licenses*, WT Docket No. 11-18, Mar. 28, 2011, at 3 (*Public Interest Qualcomm Reply*).

<sup>186</sup> See *Fourteenth Report* at 148, table 26.

<sup>187</sup> For example, AT&T recently filed to acquire the small wireless provider Redwood Wireless and its lower 700 MHz B and C Block licenses (which match AT&T's current 700 MHz licenses). *Shareholders of Redwood 700 Inc. and AT&T Inc. Seek FCC Consent to the Transfer of Control of Lower 700 MHz Band B and C Block Licenses Held by Redwood Wireless Corp.*, Public Notice, DA 11-943, ULS File No. 0004643747 (rel. May 24, 2011).

<sup>188</sup> Hogg Declaration, ¶¶ 40-41.

<sup>189</sup> *Id.* at 56. Regardless of whether T-Mobile subscribers will be migrated to an integrated UMTS network or to AT&T's LTE network, T-Mobile's network equipment would need to be modified, and T-Mobile consumers would move to different spectrum and would need new devices. Furthermore in areas where T-Mobile's AWS spectrum is allegedly needed for LTE deployment, those users would be forced to share AT&T's UMTS network

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AT&T's are forcibly moved, and whether the affected customers receive a benefit in performance or not (because AT&T users would be moving to a faster LTE network, whereas T-Mobile users might be moving onto an already constrained and slower AT&T network).

Although applicants allege that AT&T has a shortage of LTE-worthy spectrum available for use without this merger, the company has previously made clear that it could repurpose its PCS or cellular spectrum in part to fill these gaps.<sup>190</sup> Data roaming agreements with other carriers can also help fill any remaining gaps, and AT&T would have multiple potential partners for such agreements. For example, Verizon Wireless has already begun deploying a nationwide LTE network on highly compatible 700 MHz spectrum and is required by the FCC's recent data roaming rules to negotiate roaming on commercially reasonable terms and conditions.<sup>191</sup> Data roaming is a less expensive, less disruptive, and more efficient solution than a corporate merger with attendant network overhauls and consumer device transitions. Data roaming agreements allow many carriers to achieve nationwide coverage — in fact, Applicants cite the data roaming abilities of other carriers at least six times in arguing that these carriers provide meaningful competition.<sup>192</sup> Applicants cannot simultaneously argue that data roaming is appropriate for AT&T's competitors, but not for AT&T.

Although T-Mobile does not hold spare spectrum in reserve comparable to AT&T's, it, too, has other options to alleviate scarcity. The company leads in development of ever newer and

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to clear the spectrum for LTE — they could not be moved to a LTE network that does not yet exist.

<sup>190</sup> *Rinne Qualcomm Declaration*, ¶ 15.

<sup>191</sup> *See Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers and Other Providers of Mobile Data Services*, WT Docket No. 05-265, Second Report and Order, 2011 WL 1341353 (Apr 7, 2011).

<sup>192</sup> *AT&T-T-Mobile Application* at 12, 75, 83, 86, 89, 93.

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more efficient versions of HSPA+. Continued investment and innovation in HSPA+ deployment, continued expansions of T-Mobile's widespread WiFi hot-spot network,<sup>193</sup> additional data roaming agreements, and partnerships with carriers offering wholesale services seem more than sufficient to address constraints. Moreover, active bidding in future spectrum auctions would provide opportunities for T-Mobile to build LTE-Advanced networks and other future technologies.

The picture is no different in the near term. Even on a shorter timeframe, both AT&T and T-Mobile could achieve significant benefits in improving service on their HSPA networks without merging. Because T-Mobile and AT&T use different spectrum for their HSPA networks, AT&T is unable to use T-Mobile's spectrum immediately to alleviate capacity on its HSPA network — AT&T users would all require new devices to take advantage of the new spectrum. As a result, the primary alleged benefit of the merger for AT&T's HSPA network derives from cell splitting — installing AT&T equipment onto T-Mobile cell sites.<sup>194</sup> But cell splitting does not require a merger. The proposed merger adds no value to the efficiencies that could be gained from a separate, non-merger agreement between the two companies to share cell sites. AT&T's assertion that it is increasingly difficult to locate suitable new sites is irrelevant, because AT&T would not need to locate new sites under either scenario.<sup>195</sup>

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<sup>193</sup> According to T-Mobile, the company's HotSpot Network includes more than 45,000 locations across the United States. T-Mobile HotSpot U.S. Location Map, T-Mobile USA home, *available at* <https://selfcare.hotspot.t-mobile.com/locations/viewLocationMap.do> (last visited May 29, 2011).

<sup>194</sup> Hogg Declaration, ¶¶ 43-47.

<sup>195</sup> *Id.*, ¶ 43 (“In many cases, there simply are no suitable locations that could be brought on line in time to meaningfully address spectrum exhaust issues.”).

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In sum, the merger itself provides few, if any, benefits in either relieving capacity constraints or speeding buildout. What minimal benefits it confers come with significant drawbacks and could be achieved without merging the two entities. Given its limited benefits, this merger appears to be at best a stopgap move, extending slightly the window of time before AT&T's GSM and HSPA networks are so constricted as to cause significant churn, as subscribers leave for better designed and built networks, networks with cheaper service plans, or faster networks like Verizon Wireless's LTE network.

### **E. Applicants Fail to Acknowledge That Consolidating So Much Spectrum in the Control of One Entity Could Actually Diminish Investments in Infrastructure, Leading to Inefficient Use of Spectrum.**

In addition to ignoring the real harms and disruptions the merger could cause for AT&T and T-Mobile customers, Applicants ignore the possibility that merging could diminish their post-merger incentives and ability to upgrade their infrastructure. First, consider the following hypothetical: If this proposal is rejected, AT&T might begin seeing rising churn. AT&T might then be pressured to accelerate its LTE deployment, expand the use of WiFi offload, and offer incentives to its subscribers to transition more rapidly to the new network to lighten the load on its older networks. Such actions would produce greater efficiency in spectrum use and greater network performance for AT&T subscribers more quickly — and likely at lower cost than the purchase price for T-Mobile. By contrast, with fewer choices in the market, the merged entity could retain customers even after its network became capacity constrained, without needing to correct the constraints through aggressive investment.

AT&T's experience with the iPhone provides an illustrative example. When Apple released the iPhone, Apple and AT&T signed a contract guaranteeing that AT&T would be the

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sole network provider offering iPhone service for the first five years after the phone's release.<sup>196</sup> As a result, AT&T had an artificial monopoly on iPhone service. This one exclusive deal brought many millions of data-hungry customers onto AT&T's network, creating a load the company quickly acknowledged.<sup>197</sup> But the company did little to remedy these capacity constraints. Worse, rather than recognize the growing demand and limit the number of new iPhone users when facing network constraints, AT&T continued to encourage more and more users to use its network.<sup>198</sup> Imagine if an airline oversold a flight by a factor of two — but instead of taking immediate action to secure a larger plane, or giving travel vouchers to half the customers who

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<sup>196</sup> Sam Diaz, "Apple, AT&T had five-year exclusive iPhone deal but have the terms since changed?" *ZDNet*, May 10, 2010, available at <http://www.zdnet.com/blog/btl/apple-at-t-had-five-year-exclusive-iphone-deal-but-have-the-terms-since-changed/34280> (noting that court documents have confirmed the original contract was for five years). The contract was later modified, and ended after nearly four years with the introduction of the Verizon iPhone in January of 2011. Amy Thomson, Adam Satariano and Olga Kharif, "Verizon Said to Plan iPhone Launch, Helping Apple Combat Google," *Bloomberg*, Jan. 9, 2011, available at <http://www.bloomberg.com/news/2011-01-07/verizon-wireless-may-debut-iphone-next-week-to-match-at-t-analysts-say.html>.

<sup>197</sup> See Reply Comments of Consumer Federation of America, Consumers Union, Free Press, Media Access Project, New America Foundation, and Public Knowledge, *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*, WT Docket No. 09-66, Oct. 22, 2009, at 20-21 (detailing the history of AT&T's introduction of the iPhone, and the company's failure to invest adequate resources to accommodate the ongoing growth in demand).

<sup>198</sup> Only once, for a brief period, did AT&T pause its rapid iPhone user addition. See Charlie Sorrel, "Reports: AT&T Stops Some iPhone Sales in NYC," *Wired*, Dec. 28, 2009, available at <http://www.wired.com/gadgetlab/2009/12/att-stops-iphone-sales-in-nyc/> (reporting on a temporary suspension of iPhone sales in New York City, during which time one representative stated that the phone was unavailable because the city did not "have enough towers to handle the phone").

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show up, the airline simply told everyone to share their seats. No wonder consumers complained, and AT&T's service quality fell to the nation's worst.<sup>199</sup>

But AT&T could only ignore these capacity constraints because it had a monopoly on iPhone service. A truly competitive market — one without exclusive deals for devices, where consumers can choose the device they want and the network they want — would have alleviated these problems. Consumers purchasing iPhones would have distributed themselves naturally across carriers, and if any one carrier's network grew overloaded, new and switching consumers would shift to another network. Instead, the popularity of the iPhone drew all of these customers to AT&T, despite its relatively higher service prices and its reputation for poor quality.

An even more dominant post-merger AT&T will have still fewer incentives to invest in network infrastructure because it will face fewer competitors who can take away its customers. Finally, the merged entity will be comparatively cash-poor, so its *ability* to deploy infrastructure may be compromised even if it remains committed to doing so.

**F. Allowing AT&T to Acquire Spectrum from Qualcomm Would Exacerbate the Problems Caused By the Proposed Merger.**

AT&T's proposed acquisition of spectrum licenses from Qualcomm would further increase the company's dominance and the potential harms of this transaction. On the day AT&T announced its proposed acquisition of T-Mobile, this Commission was in the midst of collecting filings on an earlier proposed AT&T acquisition, a nearly \$2 billion purchase of spectrum

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<sup>199</sup> Andrew Dowell, "Consumer Reports Says AT&T 'Worst-Rated' U.S. Carrier," *Wall Street Journal*, Dec. 7, 2010 (noting that AT&T finished last in consumer surveys for the second consecutive year, and that "AT&T was the only carrier to see a substantial drop in its overall satisfaction score").

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licenses from Qualcomm.<sup>200</sup> The licenses at issue include 6 MHz of contiguous nationwide spectrum in beachfront 700 MHz range, adjacent to AT&T's current 700 MHz holdings, and an additional adjacent 6 MHz of spectrum in several major metropolitan areas throughout the country.<sup>201</sup> Numerous petitions to deny were filed in response to that application, emphasizing the potential of harm in allowing AT&T and Verizon Wireless to own a disproportionately large share of 700 MHz spectrum.<sup>202</sup> The Commission has not yet acted on the application, and the proceeding remains open.

Overall, the combined effect of the two transactions would be to create one single entity with an overwhelmingly dominant spectrum position, which could then be leveraged into anticompetitive control over a broad range of device manufacturers and competitors seeking roaming agreements. The combined acquisitions would give AT&T a commanding share in multiple distinct spectrum bands allocated for mobile broadband. AT&T already holds over 40% of spectrum in the cellular band at 850 MHz.<sup>203</sup> Combined with T-Mobile, AT&T would hold over 40% of PCS spectrum and just under 40% of AWS spectrum.<sup>204</sup> Adding Qualcomm's 700

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<sup>200</sup> See *AT&T-Qualcomm Application* at 3.

<sup>201</sup> *Id.* at 3, 5.

<sup>202</sup> *E.g.*, Petition to Deny of Free Press, Public Knowledge, Media Access Project, Consumers Union, and the Open Technology Initiative of the New America Foundation, *Applications of AT&T Mobility Spectrum LLC and Qualcomm Incorporated for Consent to the Assignment of Lower 700 MHz Band Licenses*, WT Docket No. 11-18, Mar. 11, 2011, at 9-12.

<sup>203</sup> See *Fourteenth Report* at 148, table 25.

<sup>204</sup> *Id.*

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MHz licenses would give AT&T 33% of beachfront 700 MHz spectrum in addition.<sup>205</sup> AT&T would then own more than 30% of *four separate spectrum bands*. Verizon Wireless and Clearwire each hold more than 30% of *two* bands; other carriers have less. AT&T's spectrum holdings would not only far exceed the holdings of other carriers in total size, but also in diversity. Diverse and dominant spectrum holdings gives AT&T significant influence in the design of radios and devices that work on separate bands, as well as significant power over carriers seeking to roam on those bands.

**G. Allowing AT&T to Merge with T-Mobile Would Send a Message to Spectrum License Holders That They Need Not Put Spectrum to its Most Efficient Use Because If They Fail to Do So, the FCC Will Simply Reward Them With More Spectrum.**

Approving this merger would send exactly the wrong message to license holders because it would reward AT&T's inefficient use of spectrum. If AT&T faces capacity constraints as a result of its own poor allocation decisions or underbidding at auction, such an argument should not be sufficient to justify massive consolidation. Rather, the company should face the consequences of its business judgment or invest aggressively in its own infrastructure to remedy the problems it created.

First, AT&T holds several billion dollars worth of licenses for additional spectrum in 700 MHz and AWS bands.<sup>206</sup> The company has decided to save *both* its 700 MHz and AWS holdings

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<sup>205</sup> See *id.* at 148, tables 25-26 (the addition of Qualcomm's 6+ MHz of population-weighted average 700 MHz licenses to AT&T's existing 17.0 MHz gives the company over 23 MHz, out of a total 70 MHz in licenses).

<sup>206</sup> See *Public Interest Qualcomm Reply* at 3, n.3 (briefly listing AT&T's undeployed 700 MHz holdings); *AT&T-T-Mobile Application* at 33 (labeling both AT&T's 700 MHz and AWS license holdings as 'UC' for 'Under Construction', and not marked as 'Active').

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for LTE deployment, which it has not yet deployed.<sup>207</sup> Although applicants assert that this spectrum cannot be efficiently “borrowed” for 2G or 3G network use,<sup>208</sup> such an assertion does not eliminate the conclusion that AT&T made a poor business judgment in not allocating its AWS licenses for its current HSPA network in the first place.

Second, AT&T had more than sufficient capital to purchase sufficient 700 MHz spectrum in 2008 to support an LTE network, which would have allowed it more leeway to free its AWS spectrum to meet growing demand on its HSPA network. AWS spectrum is well suited for HSPA deployment — in fact, T-Mobile’s HSPA network is built on AWS spectrum.<sup>209</sup>

Third, AT&T has a documented history of underinvestment in its network infrastructure relative to its peers, further demonstrating that it has failed to mine the full potential of the licenses it already possesses. One analyst has directly attributed AT&T’s recent capacity problems to underinvestment, noting that the company spent several billion dollars less than Verizon Wireless over a period from 2006 to 2009, and stating that AT&T needed to invest \$5 billion more than its current investment levels in order to catch up.<sup>210</sup> The company is quick to point to its overall level of investment in the United States, but less quick to separate out investment in wireless infrastructure and wireline infrastructure — particularly its U-Verse television services; in fact, according to the same analyst, the company takes in more than half of its operating income from wireless, but only directs about a third of its capital expenditures into

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<sup>207</sup> Hogg Declaration, ¶ 27. Verizon Wireless acquired 700 MHz spectrum at the same auction as AT&T, and has already deployed LTE service in many areas of the United States.

<sup>208</sup> *AT&T-T-Mobile Application* at 24.

<sup>209</sup> *Id.* at 33.

<sup>210</sup> Stephen Lawson, “Analyst: AT&T Needs to Spend US\$5B to Catch up,” *IDG News*, Jan. 19, 2010, available at <http://www.pcworld.com/businesscenter/article/187216/>.

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wireless.<sup>211</sup> More aggressive investment by AT&T in its wireless infrastructure and more rapid deployment of LTE could have put AT&T in the same position Verizon Wireless stands in today — with a new, powerful LTE network in many places in the United States that can already be used to take customers off of older networks.

Approval of this merger would be equivalent to the FCC rewarding AT&T's poor long-term business decisions by allowing the company to simply buy a competitor, significantly reducing competition to prevent the company from suffering the market repercussions of its own decisions. In sum, if the Commission intends on managing spectrum in the public interest, it will deny this merger.

**VI. Conclusion**

AT&T's acquisition of T-Mobile will create an entrenched duopoly in the market for mobile wireless service. The merger would stifle competition and innovation. It would lead to significant consumer harms and would not serve the public interest. The Commission must deny approval of the transaction and grant all other relief as may be just and proper.

Respectfully submitted,

\_\_\_\_\_/s/\_\_\_\_\_  
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<sup>211</sup> *Id.*

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Applications of AT&T, Inc. and	)	WT Docket No. 11-65
Deutsche Telekom AG	)	
	)	
For Consent to Assign or Transfer	)	
Control of Licenses and Authorizations	)	

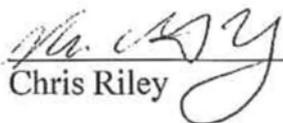
**DECLARATION OF CHRIS RILEY**  
**IN SUPPORT OF FREE PRESS'S PETITION TO DENY**

### Declaration of Chris Riley

1. I am Policy Counsel at Free Press.
2. This declaration is submitted in support of the *Petition to Deny* applications in FCC Docket Number WT-11-65.
3. Members of Free Press are customers of each of the applicants, and of many competing wireless providers, and will be adversely affected if the pending applications in this Docket are granted.
4. The factual assertions in the *Petition to Deny* of which official notice may not be taken are true to the best of my knowledge.

I declare under penalty of perjury of the laws of the United States of America that the foregoing is true and correct.

Executed on: May 31, 2011

  
Chris Riley