### Before The FEDERAL COMMUNICATIONS COMMISSION 445 12<sup>th</sup> Street, S.W., Washington, DC 20554

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In the Matter of

The State Of Mobile Wireless Competition

WT Docket No. 10-133

### COMMENTS OF AT&T INC.

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Pursuant to the Public Notice ("*Notice*") released by the Wireless Telecommunications Bureau ("Bureau") on June 30, 2010,<sup>1</sup> AT&T Inc. ("AT&T") submits the following comments.

#### **INTRODUCTION AND SUMMARY**

The Commission's Fourteenth Annual Wireless Competition Report<sup>2</sup> reads as a search for the dark lining in a silver cloud. The great bulk of the Report lays out an enormous array of facts that confirm a vibrantly competitive wireless marketplace: falling prices, expanding output, substantial new entry, unprecedented options for consumers, rapid, breathtaking innovation, and tens of billions of dollars of new investment even in the midst of an historic economic downturn. Inexplicably, however, the *Fourteenth Report* refuses to draw the obvious conclusion of the Commission's past six annual wireless reports: that the wireless marketplace is characterized by "effective competition."<sup>3</sup>

Looking past a veritable mountain of direct evidence that U.S. mobile wireless consumers

<sup>&</sup>lt;sup>1</sup> Public Notice, *The State Of Mobile Wireless Competition*, WT Docket No. 10-133 (rel. June 30, 2010) ("*Notice*").

<sup>&</sup>lt;sup>2</sup> Fourteenth Report, 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, FCC 10-81 (rel. May 20, 2010) ("Fourteenth Report" or "Report").

<sup>&</sup>lt;sup>3</sup> 47 U.S.C. § 332(c).

are reaping the benefits of a marketplace that is characterized by vigorous competitive rivalry – with providers constantly one-upping each other to offer consumers expanded and improved choices and more for less – the *Fourteenth Report* instead ballyhoos a series of indirect calculations that it suggests may be harbingers of doom.

The supposedly negative signs highlighted in the *Fourteenth Report's* executive summary and press release are, in fact, nothing of the sort. In some cases, such as the suggestions that provider investment and advertising are declining, the *Fourteenth Report* simply has the facts wrong. In other cases, such as the "weighted average" HHI concentration in the world's *least* concentrated wireless marketplace, the *Fourteenth Report* leaps to conclusions that would not be supported by its calculations even if they had been performed correctly (and they were not). And, in still other cases, such as "EBITDA" accounting "profitability," the *Fourteenth Report* itself acknowledges that no economically meaningful conclusions can be drawn from the variations between providers that it cites. Of course, none of this number-crunching can erase the directly observable market performance and, in the end, the *Fourteenth Report* attempts to shift attention entirely away from the congressional inquiry whether competition is "effective" (as it clearly is) under the theory that, no matter how effective the competition, "there are policy levers that can be used to produce superior outcomes."<sup>4</sup>

This conspicuous refusal to acknowledge effective wireless competition is not merely an academic issue – it is doing real harm. By leaving the impression that the Commission may impose regulatory "solutions" in the absence of *any* real market problems, the *Fourteenth Report* undeniably exacerbates regulatory uncertainty and discourages new infrastructure investment – a

<sup>&</sup>lt;sup>4</sup> *Fourteenth Report* ¶ 16 (quoting *Ex Parte* Submission of the U.S. Dep't. of Justice, GN Docket No. 09-51, at 11 (filed Jan. 11, 2010) ("DOJ 1/4/10 *Ex Parte*")).

particular concern given that broadband investments "are very long term in nature."<sup>5</sup> The Report quotes the Justice Department as endorsing its search for wireless "policy levers," but the quoted passage had nothing to do with the wireless marketplace in which the Department has consistently supported deregulatory policies.<sup>6</sup>

The Commission should not continue down this counterproductive path in the *Fifteenth Report*. The Commission has a well-established, four-part mode of inquiry for determining whether wireless competition is "effective": it examines market structure, market performance, provider conduct, and consumer behavior. As the remainder of these comments shows, the *Fourteenth Report* should have found that each of these measures strongly supported a finding of effective competition, and more recent developments even more strongly support such a finding in the *Fifteenth Report*.

The U.S. wireless industry structure all but guarantees the intensely competitive performance that is so readily observable. There are four nationwide facilities-based providers

<sup>&</sup>lt;sup>5</sup> Communications Daily, Regulatory Uncertainty Created by FCC Seen Limiting Network Investment, July 15, 2010 (quoting Citigroup Managing Director Mike Rollins as saying "Investors like certainty and visibility of policy," and "[t]he reason it's so important in telecom is those investments are very long term in nature. You put a dollar of capital in the ground for broadband today and the payback could be at least three to five years, in more cases than not, it's five to ten"); Yu-Ting Wang & Howard Buskirk, Reclassification Said to Pose Broad Risk to U.S. Economy, Communications Daily, at 1 (June 14, 2010) (Jonathan Chaplin of Credit Suisse explaining that "[t]he biggest disconnect between Washington and Wall Street is on how the competitiveness of the industry is viewed. . . . Competition is doing its job and regulations would make it very difficult for companies to get reasonable return on investment. . . . The threat of regulation could discourage investment and cost jobs[.]"); Anna-Maria Kovacs, Telecom Regulatory Note: D.C. Circuit vacates FCC's Comcast network-management order, Regulatory Source Associates, LLC, at 2 (Apr. 7, 2010) ("[W]e would expect the industry - telco, wireless, and cable -to assess capital investments from this point in light of the potential for new and more extensive regulations."). See also DOJ 1/4/10 Ex Parte at 28 (even in monopoly or duopoly wireline situations "[a]lthough enacting some form of regulation to prevent certain providers from exercising monopoly power may be tempting, care must be taken to avoid stifling the infrastructure investments needed to expand broadband access.").

<sup>&</sup>lt;sup>7</sup> Fourteenth Report ¶¶ 27-30.

(with a burgeoning fifth and sixth, Clearwire and SkyTerra), a number of substantial and quickly growing regional providers (such as Leap and MetroPCS), and over one hundred smaller facilities-based providers.<sup>7</sup> There are also at least 60 MVNOs, including the fifth largest provider in the nation, Tracfone.<sup>8</sup> There is significant new entry and much expansion by established providers into new markets, from Clearwire, Leap, MetroPCS, Cox, and others, with exit limited to Commission-approved mergers that were found to *benefit* consumers by, among other things, bringing new competitive offerings to more rural areas. More Americans today have more wireless choices than ever: 273 million people, or 95.8% of population, are served by at least three facilities-based wireless providers,<sup>9</sup> and the number served by at least two wireless broadband networks increased from 73% in 2008 to 90% in 2009.<sup>10</sup>

The Report's summaries and press releases downplay this good news in favor of makeshift HHI calculations. As the text of the Report notes, however, it is universally recognized that such concentration calculations do not measure the effectiveness of competition, but are, at most, an initial screen to identify mergers that may merit additional analysis.<sup>11</sup> And here, additional analysis confirms that both the absolute level of the calculated "weighted average" HHI and the recent trend are fully consistent with the effective competition that is evident from observed market performance. Higher concentration is both expected and

<sup>&</sup>lt;sup>7</sup> Fourteenth Report ¶¶ 27-30.

<sup>&</sup>lt;sup>8</sup> *Id.* ¶ 33.

<sup>&</sup>lt;sup>9</sup> *Id*. ¶¶ 44-45.

<sup>&</sup>lt;sup>10</sup> *Id.*  $\P$  47.

<sup>&</sup>lt;sup>11</sup> *Id.* ¶ 55 ("market concentration, by itself, is an imperfect indicator of market power"); *see also id.* ¶ 48 (HHI is used principally as an initial "screen" in merger cases and is useful only "*together* with firm conduct and actual industry performance"). Moreover, as the Report notes, the Justice Department employs a significantly higher initial HHI screen of 2800 in wireless merger cases. *Id.* ¶ 49 & n.109.

beneficial in capital-intensive industries like wireless. Indeed, the American wireless marketplace is the least concentrated among all OECD countries, and U.S. consumers directly benefit from the scale economies reflected in the large customer bases of the leading providers. And the modest HHI increase observed from 2007 to 2008 (after modest decreases in prior years) is, upon examination, the product of *intensified*, not reduced, competition: (1) customers taking advantage of competitive rivalry to switch to the carriers that offer them the best value propositions, and (2) mergers that the Commission expressly found to benefit the public. In all events, the Commission's approach of jumbling together local HHIs that vary widely between urban and rural areas to obtain a national "average" and ignoring MVNOs altogether provides a highly misleading and overstated view of actual market concentration.

The second factor – observed market performance – like market structure, demands a finding that competition is effective. Subscribership increased by six percent to an all-time high, 277 million, which represents a 90 percent penetration rate.<sup>12</sup> Smaller providers like Leap and MetroPCS increased their subscriber bases by 24 and 29 percent, respectively in 2009 – in both cases, gaining more new customers than either Sprint or T-Mobile – and continue rapidly to expand their coverage and customer bases.<sup>13</sup> Average minutes of use remain high, text messaging traffic has grown exponentially (to 740 billion messages in the first half of 2009), and

<sup>&</sup>lt;sup>12</sup> *Id.* ¶ 155.

<sup>&</sup>lt;sup>13</sup> Id. ¶ 175 & Chart 20. See also MetroPCS Reports First Quarter 2010 Results, Record First Quarter Adjusted EBITDA and Net Subscriber Additions (May 6, 2010) ("With this strong customer response to our Wireless for All plans, our consolidated subscriber base grew dramatically: over 10% during the first quarter. Also, over the past 12 months, in the midst of a weak economy and an increasingly competitive landscape, we have grown our subscriber base by over 21%.... We believe our new initiatives including our deployment of 4G LTE, and our focus on providing a post-pay experience on a no-signed contract, unlimited, flat-rate basis, improves our competitive position now and in the future."); Leap Press Release, Leap Reports 446,000 Net Customer Additions for Cricket Services in First Quarter 2010 (May 6, 2010).

wireless data traffic is through the roof (an estimated 85 terabytes in 2009).<sup>14</sup> And consumers receive much more for every dollar they spend than in previous years.<sup>15</sup>

Here, again, though, the Fourteenth Report strains to find the dark lining in the silver cloud, focusing on misleadingly gloomy discussions of capital expenditures and the new category of accounting "profitability." Far from representing a sign of diminished competition, the extraordinary level of industry capital expenditures is all the more remarkable given that it occurred in the most severe recession since the great depression. And, beyond that, the Commission's calculations exclude entire categories of investment, including expenditures for spectrum, investments made for services that had not been turned up (thus excluding investment for geographic expansion into new service areas and investments for new technologies like LTE), and the substantial investments by those other than the largest providers. Moreover, the Fourteenth Report's own tables show that even under this incomplete view, all of the major wireless providers *increased* their capital expenditures except for Sprint, which experienced a precipitous decline in investment as it shifts to a reliance on Clearwire – a single firm decline that completely explains the slight decline overall. Of course, given the inherent "lumpiness" of long-term network investments – investment may be higher one year as networks are upgraded to a new technology and lower the next year – it would be nonsensical to draw negative conclusions even if every firm experienced a single year decline in the level of its capital investment. And the Report itself acknowledges why EBITDA comparisons (a measure for which no GAAP standard exists) could not aid the effective competition inquiry even if a match between accounting, and true economic profits, could be assumed: in an industry defined by capital intensity, EBITDA comparisons ignore variations in firms' investment activity that preclude

<sup>&</sup>lt;sup>14</sup> Fourteenth Report ¶¶ 176-83.

<sup>&</sup>lt;sup>15</sup> *Id.* ¶¶ 202-06.

apples-to-apples comparison.<sup>16</sup>

Provider conduct also confirms robust competition. The Fourteenth Report describes the many ways in which wireless providers compete vigorously to offer innovative pricing plans<sup>17</sup> and the rapid growth of prepaid service plans.<sup>18</sup> The Report also details the wireless industry's enormous investments to extend coverage and to upgrade the technology of their networks.<sup>19</sup> If anything, this competitive activity has accelerated since the report was released, with providers continuing to expand and upgrade their networks, improve their pricing plans, and offer an ever increasing array of cutting edge devices and applications. Wireless providers have also intensified their efforts to differentiate themselves through partnerships with device manufacturers and operating system designers, and those trends are continuing today with the recent introduction of phones like the iPhone 4, Droid X, and HTC EVO, as well as data-only devices like the iPad – with the result that wireless consumers are able to do far more with their wireless services than ever before. The only "negative" the Report can find is a slight decrease in total advertising spending in 2008, but here too, the real story is unambiguously positive. Although absolute amounts declined slightly in 2008, the wireless industry actually increased its advertising relative to other industries (as the Report notes, at  $\P$  129), and because the cost of advertising decreased substantially during this recessionary time period, the wireless industry actually engaged in *more* advertising, not less.

<sup>&</sup>lt;sup>16</sup> *Id.* ¶¶ 215-18.

<sup>&</sup>lt;sup>17</sup> *Id.* ¶ 88 ("the pricing conduct of mobile wireless providers in 2009 and early 2010 included changes in the monthly price of service plans, the attachment of additional features to existing plans, the introduction of new pricing options for customers who choose to forego discounted handsets, and the launch of new unlimited prepaid service offerings"); *see also id.* ¶¶ 89-92, Table 10.

<sup>&</sup>lt;sup>18</sup> *Id.* ¶¶ 98-103.

<sup>&</sup>lt;sup>19</sup> *Id.* ¶¶ 105-23.

Finally, consumers clearly know how to vote with their feet to find the best values and bargains. Wireless consumers have many sources of information about wireless services. Rates of satisfaction are high,<sup>20</sup> and although the Report does not highlight it, consumer complaints are at an all-time low. Churn rates confirm again that consumers frequently switch providers; indeed, approximately one quarter of customers switch their service providers each year and whatever "switching costs" may exist plainly are not an impediment to competition.<sup>21</sup>

In short, the Commission should abandon the search for a dark lining in the silver wireless cloud and return to its historic practice of answering the question Congress asked based upon the real marketplace facts: the wireless marketplace plainly is effectively competitive.

#### I. MARKET STRUCTURE CONSIDERATIONS CONFIRM THAT THE WIRELESS MARKETPLACE IS INTENSELY COMPETITIVE.

Historically the Commission has begun its analysis with an assessment of "market structure." In the *Fourteenth Report*, the Commission presented extensive evidence that the wireless marketplace is fully open to effective competition. More Americans have more competitive choices than ever, as almost all Americans can choose from at least three facilities-based providers, and the vast majority can choose from at least five. The Commission has also taken action to remove regulatory barriers to entry, particularly with regard to tower siting approvals, which has made the marketplace even more conducive to competition.

The Commission's summary and press releases, however, scrupulously de-emphasize these facts in favor of the Commission's calculations of HHI. They do so, moreover, even though it is well-settled among economists and antitrust regulators that measures of market

<sup>&</sup>lt;sup>20</sup> *Id.* ¶¶ 231-32; *see also, e.g.,* John Horrigan, Ellen Satterwhite, FCC Survey, *Americans' perspectives on online connection speeds for home and mobile devices,* at 1, *available at* http://www.fcc.gov/Daily\_Releases/Daily\_Business/2010/db0601/DOC-298516A1.pdf (finding that 92 percent of customers were satisfied with their mobile wireless service).

<sup>&</sup>lt;sup>21</sup> *Id.* ¶¶ 244-48.

concentration (even assuming they are accurate) are not conclusory as to whether a market is competitive.<sup>22</sup> Rather, the HHI is intended to be an initial screen used in merger proceedings, a starting point for analysis used to determine which markets are worthy of further investigation. By exalting the HHI to a status it does not warrant and de-emphasizing the marketplace facts that demonstrate vigorous competition, the *Fourteenth Report* – and, in particular, the Executive Summary and press releases attending its release – paint a distorted view of competition in the wireless marketplace.

Ironically, a proper, if myopic, focus on HHI does not, in all events, suggest a market structure that is not conducive to competition. This years slight increase in HHI is due entirely to pro-competitive factors (mergers that were found to be in the public interest and gains by carriers that did what they are supposed to do in a competitive marketplace – compete to win customers from their rivals), and the HHI is still well within a range that is consistent with effective competition (indeed, the American wireless marketplace is the least concentrated among the leading industrialized nations in the world). Moreover, the way the Commission calculates weighted average HHIs is highly misleading, because it uses a "weighted average" of the HHIs in each EA, which hides the fact that most people live in areas with significantly lower HHIs and ignores the significant competitive force of MVNOs altogether.

The *Fourteenth Report* also raises questions about the fact that AT&T and Verizon own significant amounts of spectrum below 1 GHz, and whether the fact that such spectrum can have superior propagation characteristics than spectrum above 1 GHz raises competitive concerns. As shown below, this is a red herring. First, it was the introduction of high-band PCS spectrum that

 $<sup>^{22}</sup>$  It is well known, for example, that markets displaying very little concentration (*e.g.*, real estate agents) may fail to perform competitively, while markets displaying extremely high concentration (*e.g.*, large jetliners) may be extremely rivalrous.

revolutionized the industry, not sub-1 GHz spectrum. Second, the *Fourteenth Report* fails to account for the advantages of high-band spectrum, including the fact that it can provide greater capacity, is available in larger blocks, and that there is more of it. Third, experience proves that pro-competitive spectrum policies that auction flexible use licenses to those that value them most have promoted, not hindered, entry and expansion, and that attempts by other countries to micromanage spectrum allocations have either been abandoned or proved to be monumental failures.

# A. The Facts In The *Fourteenth Report* Confirm That Wireless Market Structure Promotes Robust Competition.

The *Fourteenth Report* collects an abundance of competitive *facts* that all point in the same direction: the wireless marketplace is wide open to competition. There continue to be four strong national wireless providers and dozens of regional and local providers, and these smaller providers are the fastest growing.<sup>23</sup> The vast majority of these wireless providers offer national coverage, using a combination of their own facilities and roaming arrangements.<sup>24</sup> As described below, the *Fourteenth Report* documented expansive new entry by well-financed competitors, as well as the continued expansion of more than 60 Mobile Virtual Network Operators (up from 40 in the *Thirteenth Report*) that lease airtime from facilities-based providers and use it to compete intensely against facilities-based providers. Indeed, the fifth largest provider in the U.S. is an MVNO.<sup>25</sup> In addition, the *Fourteenth Report* confirms that (again) the U.S. wireless industry is the least concentrated of the 26 major industrialized countries followed by the OECD, and that

<sup>&</sup>lt;sup>23</sup> Fourteenth Report ¶ 27; Fourteenth Report ¶ 175 ("MetroPCS and Leap, while smaller than the top four providers, increased their subscriber bases by about 24 and 29 percent, respectively in 2009," each of which is a substantially greater increase than any other provider); *see also id.* ¶ 72.

<sup>&</sup>lt;sup>24</sup> Fourteenth Report ¶ 29.

<sup>&</sup>lt;sup>25</sup> *Id.* ¶ 33.

remains true today.<sup>26</sup>

Given the dozens of carriers competing in the marketplace, it should come as no surprise that the vast majority of Americans, even in remote rural areas, have lots of competitive choices. The *Fourteenth Report* shows that 96.1% of U.S. customers can choose among at least three wireless voice competitors, 91.3% can choose among at least four wireless voice competitors, and that 74.4% of U.S. consumers can choose among at least 5 voice competitors.<sup>27</sup> All of these numbers are up significantly from the *Thirteenth Report* and represent all-time highs.<sup>28</sup> Moreover, the level of choice is not appreciably different in rural areas: the Commission specifically found that in areas "with a population density of 100 persons or fewer per square mile," "the percentage of the rural population with coverage by one or more providers (98.5 percent), or two or more providers (94.5 percent) is comparable to coverage for entire U.S. population" (¶ 353) and that 83.1% of these rural customers have access to 3 or more competitors. Again, these metrics are all *up* compared to the *Thirteenth Report*.<sup>29</sup>

The same is true for wireless broadband services. For the first time, the Commission provided statistics on the percentage of consumers with access to competing broadband providers, and these numbers too are very impressive. The *Fourteenth Report* shows (Table 7) that almost all – 98.1 percent – U.S. consumers have access to wireless broadband services, almost 90 percent can choose among at least 2 competitors, almost 75 percent can choose among at least three competitors, and nearly 60 percent can choose among four or more. The report

<sup>&</sup>lt;sup>26</sup> Fourteenth Report ¶ 365, Table 41; CTIA Slide Presentation, *Mobile Wireless Competition in the U.S.*, at 5 (May 11, 2010) (attached to *Ex Parte* Letter from Christopher Guttman-McCabe (CTIA) to Marlene H. Dortch (FCC), GN Docket No. 09-157 (dated May 10, 2010)) ("CTIA May 2010 Wireless Market Statistics").

<sup>&</sup>lt;sup>27</sup> *Fourteenth Report* ¶ 42, Table 5.

<sup>&</sup>lt;sup>28</sup> *Compare Fourteenth Report* ¶ 42, Table 5 *with Thirteenth Report* ¶ 42, Table 2.

<sup>&</sup>lt;sup>29</sup> Fourteenth Report ¶ 354.

confirms (Table 39) that the numbers for rural areas with 100 or fewer consumers per square mile are also improving quickly: more than 92 percent of such consumers have access to mobile broadband services, and 61.8 percent can choose among at least two alternative providers. And, of course, consumers in rural areas have access to fixed broadband services as well.

The openness of the marketplace is not mere conjecture – it is confirmed by the indisputable *fact* of substantial new entry. The *Fourteenth Report* describes in detail (¶¶ 69-73) new entry and expansion into new areas by Clearwire (using Wi-Max technology), Cox Communications (CMRS, EV-DO, LTE), and Leap and MetroPCS (CMRS, EV-DO, and LTE). The comments submitted by CTIA in this proceeding provide additional data showing that providers are continuing to enter, expand, and upgrade their networks in 2010, resulting in more and better choices for consumers. For example, at the end of 2009, Clearwire provided its Wi-Max service in 27 markets covering about 34.5 million people.<sup>30</sup> In early 2010, Clearwire expanded to 44 markets, covering about 51 million people,<sup>31</sup> and expects to enter 19 more markets this summer and 10 additional markets by the end of 2010.<sup>32</sup> Clearwire has already added more subscribers in the first quarter of 2010 that it did over the entire year in 2009.<sup>33</sup>

In addition, Harbinger recently committed, as a condition of its acquisition of Skyterra, to deploy a nationwide mobile wireless network that will cover 90 percent of the U.S. customers with a terrestrial 4G network and 100 percent of U.S. customers using a satellite network.<sup>34</sup>

<sup>&</sup>lt;sup>30</sup> Fourteenth Report ¶ 70.

<sup>&</sup>lt;sup>31</sup> Clearwire website, http://investors.clearwire.com/phoenix.zhtml?c=214419&p=irolcorpoverview.

<sup>&</sup>lt;sup>32</sup> Clearwire New Release, Clearwire Reports Strong First Quarter 2010 Results (May 5, 2010), available at http://investors.clearwire.com/phoenix.zhtml?c=198722&p=irolnewsArticle&id=1422880.

<sup>&</sup>lt;sup>33</sup> *Id*.

<sup>&</sup>lt;sup>34</sup> Memorandum Opinion And Order And Declaratory Ruling, *SkyTerra Communications, Inc.*,

Harbinger has already raised \$1 billion in financing for this project, and it recently "entered into a \$7 billion, eight-year agreement with Nokia Siemens Networks to build, install and operate Harbinger's terrestrial satellite mobile broadband network."<sup>35</sup> This agreement "lay[s] to rest some of the questions that have surrounded Harbinger's ambitious system deployment plan since the company guaranteed its layout schedule to the [Commission]."<sup>36</sup>

By contrast, the *Fourteenth Report* identifies *no* competitively harmful exit in the mobile wireless marketplace. Rather, as discussed further *infra*, all of the "exits" identified in the *Fourteenth Report* are the result of mergers and acquisitions that were scrutinized by the Commission and the Justice Department and conditioned on divestitures and other remedies to ensure that they did not result in undue concentration.<sup>37</sup>

Transferor and Harbinger Capital Partners Funds, Transferee; Applications for Consent to Transfer of Control of SkyTerra Subsidiary, 25 FCC Rcd. 3059, ¶ 56 (2010) ("Harbinger/Skyterra Merger Order") ("Harbinger's network will cover 100 percent of the U.S. population via the satellite component and ultimately over 90 percent of the population via its terrestrial component. Service will begin in two trial markets with a commercial launch commencing before the third quarter of 2011, providing service for up to 9 million POPs. Excluding satellite coverage, Harbinger has committed to a build-out schedule of its 4G terrestrial network that will provide coverage in the United States to at least 100 million people by December 31, 2012, at least 145 million people by December 31, 2015.").

<sup>35</sup> Peter B. de Selding, *Harbinger Strikes Deal with Nokia Siemens for SkyTerra Ground Network*, Space News (July 20, 2010), *available at http://www.spacenews.com/satellite\_telecom/100720-harbinger-deal-nokia.html*; *see also id*. ("Harbinger earlier had agreed to invest \$2.9 billion into the project, now called LightSquared. The company also has agreed to inject an additional \$750 million in equity. To this sum will be added \$1 billion in debt or equity whose source Harbinger and LightSquared declined to name.").

<sup>36</sup> *Id.* ("In exchange for the FCC's approval of Harbinger's acquisition of SkyTerra of Reston, Va., which is building two large L-band mobile services satellites, Harbinger promised that the multibillion-dollar ground network, consisting of some 40,000 cellular towers to work in concert with the satellites, would reach 260 million Americans by 2015.").

<sup>37</sup> Fourteenth Report ¶ 75 ("In markets where the entities were significant competitors, the Commission may have required divestitures in specified markets as conditions of the transaction in order to prevent competitive harm.").

The *Fourteenth Report* also documents various Commission actions to remove regulatory barriers to entry and expansion. First, the Commission adopted new rules to reduce delays in tower siting caused by state and local requirements, which "sets time frames for state and local zoning authorities to act on a zoning application" and "reduce[s] regulatory barriers to entry by finding that it is a violation of the Communications Act for a state or local government to deny a wireless service facility-siting application because service is available from another provider."<sup>38</sup> Second, the Commission developed a plan to make significant amounts of additional spectrum available to wireless providers.<sup>39</sup> Since the *Fourteenth Report*, the Commission has also initiated a rulemaking to remove restrictions on the use of Mobile Satellite Services spectrum for terrestrial wireless services.<sup>40</sup>

Finally, the *Fourteenth Report* confirms again that the Commission's flexible and market-oriented spectrum policies have fostered entry and have allowed wireless providers to respond quickly and efficiently to rapidly evolving consumer demand. As the report explains, new entrants have many ways to access spectrum, "including purchasing spectrum at Commission auctions, purchasing spectrum in the secondary market, and leasing spectrum in the secondary market," and that entire firms, such as Spectrum Bridge, are devoted entirely to facilitating secondary market transactions with "online market places for spectrum exchange."<sup>41</sup> As a result, "spectrum acquisitions [using these various means] have enabled certain operators – including Leap, MetroPCS, and T-Mobile – to expand networks into new markets, and to

<sup>&</sup>lt;sup>38</sup> *Id.* ¶ 59.

<sup>&</sup>lt;sup>39</sup> *Id*.

<sup>&</sup>lt;sup>40</sup> Notice of Proposed Rulemaking & Notice of Inquiry, *Fixed Mobile Servs. in the Mobile Satellite Service Bands at 1525-1559 MHz & 1626.5-1660.5 MHz, 1610-1626.5 MHz & 2483.5-2500 MHz, & 2000-2020 MHz & 2180-2200 MHz, ET Docket No. 10-142 (rel. July 15, 2010).* 

<sup>&</sup>lt;sup>41</sup> *Fourteenth Report* ¶ 62.

improve and enhance networks in existing markets."<sup>42</sup> And the Commission's efforts to free up more spectrum for mobile wireless use promise to facilitate further competitive entry and expansion.

# B. The Report's Focus On A Supposed Increase In "Concentration" Is Both Misguided and Misleading.

Although the Report itself confirms that the wireless marketplace is conducive to robust competition, the "headline" in the Commission's summaries and press releases accompanying the Report is that market concentration has supposedly increased,<sup>43</sup> and the Commission buries in the back of its report the fact that the United States has the lowest concentration among OECD countries.<sup>44</sup> Indeed, the Commission goes out of its way to emphasize that by "one widely-used measure of industry concentration" – the Herfindahl-Hirschman Index ("HHI") – concentration increased by 32 percent in the last five years and by 6 percent in the past year.<sup>45</sup> There is no defensible basis for concern, however, because (1) HHIs are merely a screen for merger analysis that say nothing about the effectiveness of competition, and the facts here show that the slight increases were due to pro-competitive developments, and (2) the Commission's method of calculating HHIs is inaccurate and misleading in all events.

*The Facts Here Dispel Any Concern About the HHI.* The HHI is an analytical tool developed for use in merger proceedings. It is a starting point for determining whether a merger "is likely to create or enhance market power or to facilitate its exercise."<sup>46</sup> As economists have

<sup>&</sup>lt;sup>42</sup> *Id.* ¶ 107.

<sup>&</sup>lt;sup>43</sup> *Id.*  $\P$  4.

<sup>&</sup>lt;sup>44</sup> *Id.* ¶ 365, Table 41.

<sup>&</sup>lt;sup>45</sup> *Id*.  $\P$  4.

<sup>&</sup>lt;sup>46</sup> U.S. Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines*, § 0.2.

explained, however, the "Merger Guidelines approach . . . was not designed to measure the existence of market power."<sup>47</sup> Indeed, the Guidelines take current price levels and the existing level of competition as a given; they do not provide any means for determining whether the market is in fact competitive or whether current price levels are competitive.<sup>48</sup> Concentration metrics are meaningless by themselves,<sup>49</sup> and it has thus been "many years since anyone knowledgeable about" competitive analysis "thought that concentration by itself imported a diminution in competition."<sup>50</sup>

Even in the context of a merger review, the HHI is merely an initial screen, to determine whether it would be useful to take a closer look at the actual marketplace facts.<sup>51</sup> As explained by the Commission, "[i]n evaluating the competitive effects of this transaction, our initial [HHI] screen eliminates from further review those markets in which there is clearly no competitive harm relative to today's generally competitive [wireless] marketplace."<sup>52</sup> Concentration

<sup>&</sup>lt;sup>47</sup> Reply Declaration of Dennis W. Carlton, Allan L. Shampine, & Hal S. Sider, ¶ 53 (Exhibit A to Reply Comments of AT&T Inc., *Special Access Rates for Price Cap Local Exchange Carriers*, WC Docket No. 05-25 (filed Feb. 24, 2010)) ("Carlton-Shampine-Sider Reply Decl.") (emphasis in original).

<sup>&</sup>lt;sup>48</sup> *Id.* ¶ 54.

<sup>&</sup>lt;sup>49</sup> See, e.g., Declaration of Michael Katz, ¶¶ 16, 23 ("Katz Decl.") ("measures of concentration suffer from several drawbacks that limit their usefulness or invalidate them as stand-alone indicators," and "it would be a mistake to simply assume that the market in question is not effectively competitive" merely based on such indicators) attached to Reply Comments of AT&T Inc., *Wireless Telecommunications Bureau Seeks Comment On Commercial Mobile Radio Servs. Market Competition*, WT Docket No. 09-66 (filed July 12, 2009); *see also Fourteenth Report* ¶ 48 (pointing out that HHI measures are useful only when "evaluated together with firm conduct and actual industry performance").

<sup>&</sup>lt;sup>50</sup> *Capital Cities/ABC, Inc.* v. *FCC*, 29 F.3d 309, 315 (7<sup>th</sup> Cir. 1994); *U.S.* v. *Syufy Enters.*, 903 F.2d 659, 665-66 (9<sup>th</sup> Cir. 1990) ("In evaluating monopoly power, it is not market share that counts but rather, the ability to *maintain* market share") (emphasis in original).

<sup>&</sup>lt;sup>51</sup> See id., ¶¶ 16-30.

<sup>&</sup>lt;sup>52</sup> Mem. Op. & Order, Applications of AT&T Inc. & Centennial Communications Corp. For Consent to Transfer Control of Licenses, Authorizations, & Spectrum Leasing Arrangements, 24

measures "are the beginning, not the end, of the competitive analysis" because they merely provide "information as to which markets need more in-depth, multidimensional analysis of potential anticompetitive effects."<sup>53</sup> And the DOJ and FTC are affirmatively moving *away* from rigid use of the HHI in analyzing the potential impact of mergers; the revised draft of the Guidelines now emphasizes that concentration measures do not "provide a rigid screen to separate acceptable mergers from anticompetitive transactions" but instead only "provide one way to identify those mergers for which it is particularly important to examine whether other competitive factors confirm, reinforce, or would counteract the potential harmful effects of increased concentration."<sup>54</sup>

Because the HHI is only the starting point of a market structure analysis in the context of a merger review proceeding, the *Fourteenth Report*'s emphasis of HHI data, particularly in the face of so much evidence of vigorous actual competition, was improper. Even if these findings with regard to the HHI were accurate and complete, these findings would not trump the compelling data demonstrating that actual wireless competition is as robust as ever, if not more so. But, in fact, the analysis of concentration in the *Fourteenth Report* is woefully incomplete. The Commission makes much of the fact that its estimate of the average HHI increased by 6 percent (even though the HHI has been essentially stable for several years),<sup>55</sup> but an examination of the actual marketplace facts confirms that the small increase in HHI was due to two factors,

FCC Rcd. 13915, ¶ 46 (2009) ("AT&T-Centennial Order").

<sup>&</sup>lt;sup>53</sup> Memorandum Opinion & Order, *Applications of AT&T Wireless Services, Inc. and Cingular Wireless Corporation; For Consent to Transfer Control of Licenses and Authorizations, 19 FCC Rcd. 21522, ¶ 96 (2004) ("AT&T-Cingular Merger Order").* 

<sup>&</sup>lt;sup>54</sup> Draft Horizontal Merger Guidelines, at 19.

<sup>&</sup>lt;sup>55</sup> The statement that HHI's have increased by 32% since 2003 (*Fourteenth Report* ¶ 4) is misleading, because the vast majority of that increase occurred from 2003 to 2005. The HHI has been stable and fluctuating in a narrow range since, and actually had been declining prior to 2008.

both of which are pro-competitive: Commission-approved mergers and competitive wins in the marketplace.

As the *Fourteenth Report* notes, one of the main factors contributing to the 6% increase in HHI levels was a series of mergers that occurred in 2008.<sup>56</sup> The Commission approved these mergers only after considering the mergers' impact on competition and adopting appropriate conditions that "prevent[ed] *entirely* consolidation in individual markets from advancing to a point at which it would threaten competition and potentially harm consumers."<sup>57</sup> The Commission thus concluded that each of these mergers "would serve the public interest, convenience, and necessity."<sup>58</sup> For example, in the Verizon-Alltel merger, the DOJ and the Commission required, as a condition of their approval, that Verizon and Alltel divest spectrum and other assets in every area where the merger would have reduced the number of wireless competitors to three or fewer.<sup>59</sup> These mergers have manifestly benefited consumers and intensified competition – often resulting in a national or large regional provider entering a rural or underserved area, bringing customers in those areas access to the same wireless services and products that are available to customers in the most densely populated areas.<sup>60</sup>

<sup>&</sup>lt;sup>56</sup> Fourteenth Report ¶ 51. These mergers include "AT&T/Aloha (August 2008), T-Mobile/Suncom (February 2008), Verizon Wireless/Rural Cellular (August 2008), and Verizon Wireless/Alltel (January 2008)." *Id.* 

<sup>&</sup>lt;sup>57</sup> Mem. Op. & Order & Declaratory Ruling, 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, 23 FCC Rcd. 17444, ¶ 4 (2008) ("Verizon-Alltel Merger Order") (emphasis added).

<sup>&</sup>lt;sup>58</sup> *Id.* ¶ 3.

<sup>&</sup>lt;sup>59</sup> *Id.* ¶ 101.

 $<sup>^{60}</sup>$  See, e.g., Id. ¶ 119-156 (these transactions "result in expanded and improved services and features for wireless customers, especially in rural areas," "increased broadband deployment and next generation services," "higher quality service," and "increase[d] efficiency and . . .

The other main reason why the HHIs increased slightly from 2007 to 2008 is that the certain providers gained market share in some EAs by successfully winning customers from other providers in the normal back and forth as providers compete for customers – a hallmark of competition, not a lack it. For example, Sprint, due to a number of factors, lost millions of customers to rivals that offered them better services, a trend that Sprint has only recently begun to curb the old-fashioned way: by advertising lower prices, better service and more amenities.<sup>61</sup> Individual provider fortunes ebb and flow, but the increased concentration that results from these market share increases and decreases must be recognized for what it is: confirmation of an effectively competitive marketplace.

In all events, even relatively "high" measures of "concentration" are fully compatible with a vigorous competitive wireless industry. The current FTC and DOJ economists have strongly criticized any attempt to "link[] increases in concentration to declines in market performance," explaining that "[i]n recent decades . . . industrial organization scholars and the courts have been more apt to stress that high concentration can be compatible with vigorous competition and efficient market performance."<sup>62</sup> Study after study shows that "a number of U.S. industries – including several that nearly all would regard as competitive – are relatively concentrated" as measured by HHIs.<sup>63</sup> And, as Professor Dennis Carlton has explained, the DOJ

economies of scale and scope.").

<sup>&</sup>lt;sup>61</sup> See Sprint News Release, Sprint Nextel Reports Second Quarter 2010 Results (July 28, 2010), available at http://investors.sprint.com/phoenix.zhtml?c=127149&p=irolnewsArticle&ID=1452819&highlight= ("The company achieved its best year-over-year quarterly improvement in postpaid gross subscriber additions in more than five years").

<sup>&</sup>lt;sup>62</sup> Joseph Farrell & Carl Shapiro, *Antitrust Evaluation of Horizontal Mergers: An Economic Alternative to Market Definition*, at 4 (Working Paper, Nov. 25, 2008).

<sup>&</sup>lt;sup>63</sup> George Ford, Thomas M. Koutsky, Lawrence J. Spiwak, *Competition after unbundling: entry industry structure, and convergence,* Federal Communications Law Journal, at 339 (March 2007) (For example, the household refrigerator and freezer business has an HHI of over 2000,

and FTC have chosen not to challenge large portions of merger proceedings with concentration ratios of 3000 and higher.<sup>64</sup>

High HHIs are particularly commonplace in markets that, like wireless, are characterized by high sunk costs and large economies of scale and scope.<sup>65</sup> "As consistently demonstrated by academic research, given the huge fixed and sunk costs inherent to the construction and commercial operation of communications networks, the equilibrium level of concentration of terrestrial firms in the local communications markets (voice, video, and data) will be relatively high."<sup>66</sup> When the Commission has previously reported CMRS HHIs, it has cautioned that, where "the scale [or] output at which a firm can fully exploit scale economies (the minimum efficient scale) is large relative to potential demand, there will be room in the market for only a small number of firms operating at the lowest possible cost" and, as a result, "market concentration in such industries will tend to be high relative to industries characterized by greater potential demand or smaller minimum efficient scale."<sup>67</sup> Similarly, when reviewing wireless mergers, the Commission employs a "screen" under which it has determined that where the merger will result in an HHI below 2800 and will not increase the HHI by more than 250, "there is clearly no competitive harm in today's generally competitive marketplace."<sup>68</sup>

silverware manufacturing has an HHI of nearly 2800, and glass container manufacturing has an HHI of 3000).

<sup>&</sup>lt;sup>64</sup> Dennis W. Carlton, Comment on Department of Justice And Federal Trade Commission's Proposed Horizontal Merger Guidelines, ¶ 12 (filed June 4, 2010).

<sup>&</sup>lt;sup>65</sup> See Katz Decl. ¶¶ 21-23, 30.

<sup>&</sup>lt;sup>66</sup> George Ford, Thomas M. Koutsky, Lawrence J. Spiwak, *Competition after unbundling: entry industry structure, and convergence,* Federal Communications Law Journal, at 4 (March 2007).

<sup>&</sup>lt;sup>67</sup> Ninth Report ¶ 55; see also Tenth Report ¶ 47; Eleventh Report ¶ 46; Twelfth Report ¶ 53; Thirteenth Report ¶ 48.

<sup>&</sup>lt;sup>68</sup> Memorandum Opinion & Order, Applications of Wireless Telecommunications, Inc., Debtor-In-Possession, Assignor and The Vermont Telephone Company, Inc., Assignee, 24 FCC Rcd.

Here, according to the data in Appendix C to the *Fourteenth Report*, more than 70 percent of the U.S. population is located in EAs with an HHI below 2800. The remaining 30 percent are typically located in much more rural areas that can support fewer firms than less rural areas. The HHIs in many of these areas, however, would fall below 2800 if the calculation included MVNOs. Even without MVNOs, virtually all of these areas still have three or more facilities-based competitors (*see Fourteenth Report*, Table 5), and at least one of these competitors is typically a national competitor. AT&T and other national competitors offer the same services, devices options, voice plans, data plans, and other benefits throughout their service areas, and thus consumers in these areas benefit from the same nationally available pricing and options that are offered to more urban consumers. HHIs are just a starting point for analysis, and the actual *facts* concerning the wireless marketplace confirm that "concentration" poses no legitimate issue for the openness of competition in this marketplace.

The Commission's HHIs Are Inaccurate and Misleading. Beyond that, the HHI figure used in the Fourteenth Report is not actually an HHI. Rather, it is a weighted average, by population, of the HHIs of each Economic Area ("EA") across the country. A proper HHI statistic is the sum of the squares of the market shares of each provider in the market being examined. The Commission's approach of arbitrarily dividing providers' market shares among different EAs and then recombining them through weighted averaging does not produce an HHI metric at all, but rather a largely meaningless, Frankenstein statistic that of mathematical necessity will produce higher HHI metrics than properly calculated national HHI statistics.

The Commission's "weighted average" hides the reality of the wireless marketplace. The overall HHI of the wireless marketplace, taken as a national market, is far below 2800 (about

<sup>3177, ¶¶ 15-16 (2009).</sup> 

2200 by one estimate cited in the Fourteenth Report).<sup>69</sup> Similarly, the vast majority of Americans live in EAs that have HHIs well below 2800. There is a small percentage of Americans who live in very rural areas that cannot support a large number of facilities-based providers, and HHIs are - predictably - significantly higher in those EAs. The Commission could reasonably look at either of these measures -i.e., recognizing that national and regional wireless providers typically do not charge different prices or offer different service plans in different areas, it could accept that the national marketplace is remarkably unconcentrated, or it could do an EA specific analysis and acknowledge that very rural areas present special challenges that could perhaps be met with targeted subsidies or other similar measures. But what it cannot reasonably do is hide the reality in a "weighted average" that systematically increases the HHI calculations and thus effectively artificially inflates concentration of the entire national marketplace. Gerrymandering the market participants' shares into smaller areas in this fashion, simply to create higher "local" market shares, which are then squared and averaged back into a "weighted average," obfuscates the issues. In essence, the squaring of the rural market shares is dominating the effect of weighting the average by population, and the result is a misleading "average" that masks the fact that the vast majority of the nation lives in EAs with HHIs well below 2800.

The result is a false precision that actually produces no useful information. The Commission compares its weighted average to the thresholds used by the Commission, DOJ and other agencies when assessing ordinary HHI computations, but this is an apples-to-oranges comparison, because those agencies do not use those types of weighted averages in merger proceedings. The weighted average tells the Commission little about what is happening

<sup>&</sup>lt;sup>69</sup> Fourteenth Report, Chart 41.

anywhere, either locally or nationally. For example, according to the Commission's data, the Chicago EA has one of the lowest HHI values for 2008 at 2140, which is actually *down* slightly from 2151 in 2007. The Burlington, Vermont EA has one of the highest 2008 HHIs at 8263, which is 73% higher than the 2007 HHI of 4776. When these values are averaged (weighted by EA population), the average 2007 HHI was 2309 and the average 2008 HHI was 2551, an increase of about 242 or 10.5%. But this statistic tells the Commission nothing about what happened in either Chicago (where HHIs went down) or Burlington (where HHIs are much higher), and combining figures like these provides no insight at all into the overall national market structure.

The Commission's methodology has other problems as well. Most notably, it does not count MVNOs. MVNOs are providers that purchase minutes from facilities-based providers and independently resell those minutes, along with substantial customer support, in competition with the facilities-based provider. MVNOs are among the largest and fastest growing competitors in the United States. Indeed, one MVNO, Tracfone, is the *fifth* largest wireless provider, in terms of subscribers, in the nation.<sup>70</sup>

The Commission's analysis lumps MVNO customers into the total number of customers for the facilities-based provider from which the MVNO purchases its minutes (the "host provider"). But this fails to account for the significant competitive pressure that MVNOs actually place on facilities-based providers. MVNOs compete vigorously with innovative pricing plans, service offerings, customer support, devices, applications, and much else, and they routinely win customers from facilities-based providers, including their host providers. Host providers have strong incentives to compete vigorously against all MVNOs – including those for

<sup>&</sup>lt;sup>70</sup> Fourteenth Report ¶ 33.

which it is the host provider – to win the retail customer. As the *Fourteenth Report* notes, "[a]nalysts see both the Straight Talk unlimited offering and the Boost Unlimited plan [both prepaid offerings by MVNOs] as competitive threats to [prepaid] unlimited players Leap and MetroPCS [both facilities-based providers]."<sup>71</sup> The Commission's failure to account for this very substantial source of competition in its average HHI statistics makes its conclusions even more unreliable.

# C. The Commission's Focused On The Allocation Of Spectrum Is A Red Herring.

The Commission's historic policies of allocating spectrum under flexible licenses to the highest value user are in no small part responsible for the unprecedented levels of investment, innovation, and expansion in the wireless marketplace documented in the *Fourteenth Report* and throughout these comments. The *Fourteenth Report*, however, tries to turn this lemonade into lemons. The *Fourteenth Report* explains that spectrum below 1 GHz can have better propagation characteristics than spectrum above 1 GHz, and that competition therefore may be affected by the fact that providers with more sub-1 GHz spectrum may be able to deploy service using fewer cell towers than providers with spectrum above 1 GHz. This concern is clearly unwarranted, for several reasons.

<sup>&</sup>lt;sup>71</sup> *Id.* ¶ 102. For example, "[f]ollowing the launch of Tracfone's low priced service offering, MetroPCS enhanced its unlimited local calling plan in August 2009 by reducing the monthly charges for add-on features such as text messaging and various other data services. Leap responded with similar changes to the pricing of add-on features for its Cricket service plans shortly thereafter. MetroPCS made another round of similar price cuts to add-on features in the fourth quarter of 2009, and Leap again followed suit. With each round of changes, MetroPCS and Leap lowered the monthly recurring charge for applicable features by five to ten dollars." *Id.* ¶ 103. In addition, Sprint recently purchased Virgin Mobile USA – an MVNO – and explained that "Sprint is committed to growing its prepaid business and this transaction will provide us with the resources and opportunities to compete more aggressively, and strengthen our position in prepaid." Sprint Press Release, *Sprint Nextel To Acquire Virgin Mobile USA* (July 28, 2009), *available at* http://newsreleases.sprint.com/phoenix.zhtml?c=127149&p=irol-newsArticle\_newsroom&ID=1312854.

First, history teaches that access to sub-1 GHz is hardly vital to competition. The introduction of 120 MHz of PCS spectrum at 1.9 GHz revolutionized the industry, clearly demonstrating that higher-band spectrum can and has played a significant role in fostering competition.

Second, the Commission's discussion completely fails to account for the capacity-centric deployments that network providers are designing today to support 3G and 4G services. Today, capacity and throughput (not propagation) are king. In this critical respect, the *Fourteenth Report* admits that spectrum *above* 1 GHz has distinct advantages, particularly in urban and suburban areas where there are significant sub-1 GHz spectrum constraints. For example, spectrum above 1 GHz can provide greater capacity in the geographic area it covers,<sup>72</sup> it is available in larger blocks, and there is more of it.<sup>73</sup> In short, propagation characteristics are only one of many characteristics of spectrum, and pointing to one of its advantages without considering advantages of other spectrum provides no relevant insight into the competitive landscape.

Third, the notion that a lack of spectrum under 1 GHz is a barrier to entry or expansion is

<sup>&</sup>lt;sup>72</sup> See, Fourteenth Report ¶ 272 ("Conversely, higher frequency spectrum may be particularly effective for providing significant capacity, or increasing capacity, within a smaller geographic area. In certain situations, higher frequency bands can achieve greater improvements in capacity. For instance, capacity enhancement technologies such as MIMO may perform better at higher frequencies. . . . Thus higher-frequency spectrum can be ideally suited for providing high capacity where it is needed, such as high-traffic urban areas.").

<sup>&</sup>lt;sup>73</sup> *Id.* ("[I]n many parts of these higher bands, spectrum is licensed in larger contiguous blocks, which can enable operators to deploy wider channels and simplify device design"). The *Fourteenth Report's* assertion that improved propagation characteristics for sub-1 GHz spectrum can reduce the number of cell towers needed to cover and area and thus reduce costs is also flawed, because it fails to account for the many other cell tower costs. Clearwire, for example, claims that its cell tower costs using 2.5 GHz spectrum are nearly half that of other cell providers. *See* Clearwire Investor Presentation, Feb. 10, 2010, slide 10, *available at* http://phx.corporate-

ir.net/External.File?item=UGFyZW50SUQ9Mjc4NDc1OHxDaGlsZEIEPTM3MTE4MXxUeXB IPTI=&t=1.

refuted by real world facts. Providers with all types of spectrum are continuing to make extremely large investments to develop, deploy, upgrade, and expand their networks. Clearwire, for example, is rapidly deploying a nationwide wireless broadband network using its immense holdings of 2.5 GHz spectrum.<sup>74</sup> Clearwire has touted that it has a "spectrum advantage"<sup>75</sup> and Clearwire's partner, Sprint, recently bragged that it had enough spectrum to deploy both a successful nationwide WiMax network *and* a nationwide LTE network.<sup>76</sup> Similarly, MSS provider Harbinger/Skyterra, which uses spectrum above 1 GHz, has committed to deploying a nationwide MSS-based mobile wireless network within the next few years.<sup>77</sup> In addition, a lack of sub 1 GHz spectrum has not hampered T-Mobile's from upgrading and expanding its network to HSPA+, which it claims "now offers 4G speeds to more people than any other wireless network in the country"<sup>78</sup> Nor has a lack of sub 1 GHz spectrum impeded the rapid entry and expansion of smaller providers, like MetroPCS and Leap, which are the *Fourteenth Report* recognizes are the fastest growing providers in the U.S.<sup>79</sup>

Finally, the assertions in the *Fourteenth Report* that the U.K. and Germany placed limits on the amount of sub-1 GHz spectrum that incumbent in those countries could purchase are

<sup>74</sup> Clearwire's 2.5 GHz spectrum holdings significantly exceed the spectrum holdings of either

AT&T or Verizon. See, e.g., Fourteenth Report ¶ 268, Chart 40.

<sup>&</sup>lt;sup>75</sup> See Clearwire Investor Presentation, Feb. 10, 2010, slide 12, *available at* http://phx.corporateir.net/External.File?item=UGFyZW50SUQ9Mjc4NDc1OHxDaGlsZEIEPTM3MTE4MXxUeXB IPTI=&t=1.

<sup>&</sup>lt;sup>76</sup> See Communications Daily, July 16, 2010 (Sprint CEO Dan Hesse tells Financial Times "[w]e have the spectrum resources where we could add LTE if we choose to do that, on top of the WiMAX network . . . that is the beauty of having a lot of spectrum is that we have a lot of flexibility").

<sup>&</sup>lt;sup>77</sup> Harbinger/Skyterra Merger Order ¶ 56.

<sup>&</sup>lt;sup>78</sup> T-Mobile Press Release, T-Mobile HSPA+ Network Now Delivers Broadest Reach Of 4G Speeds In U.S. (July 21, 2010), *available at http://press.t-mobile.com/articles/t-mobile-HSPA-4G*.

<sup>&</sup>lt;sup>79</sup> Fourteenth Report ¶ 175.

irrelevant and only confirm the folly of such "caps." The U.K. has since *abandoned* those proposed restraints on the grounds that they are not needed to promote broadband competition.<sup>80</sup> In Germany, the plan did not work. The auction "fizzled out after more than a month of incremental bidding" with only the four incumbents bidding.<sup>81</sup>

### II. MARKET PERFORMANCE METRICS CONFIRM THAT THE WIRELESS MARKETPLACE IS HIGHLY COMPETITIVE.

As the Commission has explained "[t]he structural and behavioral characteristics of a competitive market are desirable not as an ends in themselves, but rather as a means of bringing tangible benefits to consumers,"<sup>82</sup> and "consumer outcomes are the ultimate test of effective competition."<sup>83</sup> Accordingly, the Commission has always examined traditional market performance issues, including trends in pricing, penetration, output, investment, innovation, and quality of service. Again, these metrics overwhelmingly show continued improvements over the *Thirteenth Report* when the Commission last found the wireless marketplace to be effectively

<sup>&</sup>lt;sup>80</sup> See, e.g., David Meyer, Government sets out 4G spectrum auction plans, ZDnet UK (July 28, 2010), available at http://www.zdnet.co.uk/news/mobile-working/2010/07/28/government-setsout-4g-spectrum-auction-plans-40089674 ("The [U.K.] coalition's SI [Statutory Instrument] is very close to that laid down by the Labour government in March, with notable differences being the lack of a government-mandated cap on spectrum holdings"); Explanatory Memorandum To The Wireless Telegraphy Act 2006 (Directions To Ofcom), Order 2010, 2010 No. Draft, Analysis Summary: and Evidence, available at 6. at http://www.opsi.gov.uk/si/si2010/draft/em/ukdsiem 9780111500767 en.pdf ("In contrast to previous solutions considered by the UK Government, at the present time, Ofcom would not be directed to introduce quantitative restrictions on holdings of particular frequencies (so-called 'spectrum caps')"). As explained in the Explanatory Memorandum that accompanied the elimination of spectrum caps, technology trends and broadband demand "reduce[d] [the] competition concerns" on which the original caps were based." Id. at 11.

<sup>&</sup>lt;sup>81</sup> Michael Newlands, Big three operators happy with low-cost German auction, Policy Tracker (May, 26, 2010), *available at http://www.policytracker.com/search?Subject:list=Wireless%20broadband&Type=News%20Ite m.* 

<sup>&</sup>lt;sup>82</sup> Fourteenth Report ¶ 153.

<sup>&</sup>lt;sup>83</sup> *Thirteenth Report* ¶ 187.

competitive. Output is up dramatically, prices continue to decline, penetration has reached over 90% and is high among all demographics, investment continues to be extremely high (which is particularly extraordinary given the recent economic recession), innovation continues at breakneck speed, and quality of service is at record levels.

Indeed, the U.S. leads the rest of the world in every metric. U.S. customers have more choices than customers in other countries,<sup>84</sup> and U.S. customers use more voice minutes and more data than do those in any other country.<sup>85</sup> And, U.S. customers also pay lower prices than customers in other countries.<sup>86</sup> In addition, U.S. providers are leading the world in the wireless broadband revolution. The U.S. "ranks 1<sup>st</sup> in world 3G subscribers," and it "led the world in 3G net adds in 2009."<sup>87</sup> "While the U.S. accounts for only 6% of the total world's total wireless subscribers, the U.S. has more than 21% of the worlds 3G subscribers."<sup>88</sup> U.S. customers

<sup>&</sup>lt;sup>84</sup> CTIA May 2010 Wireless Market Statistics, slide 6 ("Of the 26 OECD countries tracked, 12 have three or fewer competitors, 12 have four, and only the U.S. and Canada have more than five"); *Fourteenth Report*, Table 5 (showing that nearly three quarters of the U.S. population can choose among 5 or more competitors).

<sup>&</sup>lt;sup>85</sup> Fourteenth Report, Table 40 (showing U.S. with average voice minutes of 829, nearly double that of the next closest country, Hong Kong at 447 average minutes); see also id. ¶ 362 ("U.S. mobile subscribers talked an average of 829 minutes per month on their mobile phones in the fourth quarter of 2008. This compares with 139 MOUs in Japan and an average across Western Europe of 158 MOUs, with estimated MOUs in individual European countries ranging from a low of 102 in Germany to a high of 246 in France."); see also CTIA Wireless Facts, available at http://files.ctia.org/pdf/051710\_-\_Independent\_Assessment\_of\_Wireless\_Industry.pdf ("The U.S. has the highest MOUs per month per user and the lowest average revenue per minute of service out of the 26 OECD countries tracked by Bank of America Merrill Lynch" and "[t]he U.S. has the largest mobile data market and the most mobile Internet users than any other country").

<sup>&</sup>lt;sup>86</sup> *Fourteenth Report*, Table 40 (1994-2008 prices); Comments of CTIA, *Framework for Broadband Internet Service*, GN Docket No. 10-127, at 20 (filed July 15, 2010) ("CTIA Broadband Framework Comments") (2009 prices).

<sup>&</sup>lt;sup>87</sup> Chris Pearson, *The Mobile Broadband Evolution, The Changing World of Wireless*, at 4, 3G Americans.

<sup>&</sup>lt;sup>88</sup> CTIA May 2010 Wireless Market Statistics, at 9.

purchase more than two times as many smartphones as the next closest country (China),<sup>89</sup> and U.S. customers are typically the first to have access to the latest technology.<sup>90</sup> Cutting edge devices are typically made available first in the U.S., and the U.S. is leading the world in deployment of next generation LTE services, as well as other types of mobile wireless broadband services, including WiMAX and MSS-based services.<sup>91</sup> These remarkable successes are the direct result of intense rivalry among U.S. wireless providers.

The *Fourteenth Report* de-emphasizes these consumer-focused facts and places greater weight on newly devised metrics apparently designed to avoid the conclusion that the wireless marketplace is effectively competitive. But, as discussed below, even the Commission recognizes that these new metrics – such as accounting profits – are largely invalid and certainly irrelevant to the Commission's intended clients, *i.e.*, customers.

1. Output and Prices. Despite extraordinarily high penetration levels (discussed below), the *Fourteenth Report* shows that subscribership continued to grow into 2009 for virtually all providers (with the exception of Sprint),<sup>92</sup> voice usage continues to be strong (although consumers increasingly substitute text messaging, email, instant messaging, and VoIP),<sup>93</sup> text

<sup>&</sup>lt;sup>89</sup> Chris Pearson, *The Mobile Broadband Evolution, The Changing World of Wireless*, at 4, 3G Americans.

<sup>&</sup>lt;sup>90</sup> CTIA Broadband Framework Comments, at 11.

<sup>&</sup>lt;sup>91</sup> *Id.*, at 11 ("[A]lmost all of the 'hottest' and most innovative smartphones are first launched in the United States. These devices include the Apple iPhone, iPhone 3G, iPhone 3GS and iPhone 4; Apple iPad; Google G1, MyTouch and Nexus One; Blackberry Storm, Bold, Pearl, Tour and Curve 8900; Samsung Instinct; Palm Pre and Pixi; Amazon Kindle; Barnes & Noble Nook, and the EVO 4G from HTC."); Chris Pearson, *The Mobile Broadband Evolution, The Changing World of Wireless*, at 4, 3G Americans (showing U.S. leading world in LTE deployment).

<sup>&</sup>lt;sup>92</sup> Fourteenth Report, Table 14 & ¶ 171. The report shows overall subscriber growth of 2.9 percent for the first quarter of 2009, which is lower than historical growth. *Id.*, Chart 19. But that is most likely attributable to the already high penetration rate (90%) and the impact of the economic downturn and corresponding decreased consumer spend on all goods and services.

 $<sup>^{93}</sup>$  *Id.* ¶ 176 (citing data submitted by CTIA).

messaging continues to increase by hundreds of billions every six months,<sup>94</sup> and broadband data usage is increasing exponentially.<sup>95</sup> Moreover, output is high across all demographics and types of service plans.<sup>96</sup> The Comments of CTIA that will be filed in this proceeding show that these trends continued into 2010.

At the same time, prices are lower – already almost the lowest in the world – continue to decline. According to the *Fourteenth Report*, the per minute price of voice services fell from \$0.41 cents in 1994 to about a nickel. More recent data from CTIA shows that it continued to fall in 2009 to \$0.04.<sup>97</sup> Prices for text messaging fell by more than *half* in 2008 (\$0.011) compared to 2007 (\$0.025).<sup>98</sup> And monthly broadband prices have remained constant or have declined, even as consumers continue to use exponentially *more* data services every month, resulting in significant per unit declines in prices.<sup>99</sup> Not surprisingly, the consumer price index for wireless shows decreasing prices, while overall consumer prices have been increasing.<sup>100</sup>

<sup>&</sup>lt;sup>94</sup> *Id.* ¶ 178-180 (citing data submitted by CTIA).

<sup>&</sup>lt;sup>95</sup> Id. ¶¶ 181-184; See also Cisco White Paper, Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2009-2014 (Feb. 9, 2010) (predicting exponential growth in data traffic from 2009 through 2014); AT&T Tees Up the 3G Mobile Broadband Network in the Greenbrier and Lewisburg, CNNMoney.com (July 26, available 2010), at http://money.cnn.com/news/newsfeeds/articles/prnewswire/CG40353.htm ("Wireless data traffic on the AT&T network grew more than 5,000 percent from 2007 to 2009, largely attributed to the increasing popularity of advanced smartphones and the performance of AT&T's 3G network, the nation's fastest."); Jennifer Johnson, Droid X Users Consume 5X More Data, Hothardware (July 22, 2010) (quoting Verizon as stating that "Droid X owners . . . use five times the amount of data [compared to] other smartphone owners"), available at http://hothardware.com/News/Droid-X-Users-Consume-5X-More-Data/.

<sup>&</sup>lt;sup>96</sup> Fourteenth Report ¶ 163-64.

<sup>&</sup>lt;sup>97</sup> *Fourteenth Report*, Table 19 (showing 1993 to 2008 per minute voice prices); CTIA Broadband Framework Comments, at 20 (showing 2009 per minute voice prices).

<sup>&</sup>lt;sup>98</sup> Fourteenth Report, Table 20 (citing CTIA data and Commission estimates).

<sup>&</sup>lt;sup>99</sup> As discussed in Part II.A, below, prices for broadband plans have remained steady or decreased. At the same time, as noted above, broadband usage is growing exponentially.

 $<sup>^{100}</sup>$  Id. ¶ 186 ("From 2007 to 2008, annual Cellular CPI decreased . . . while the overall CPI

Although these developments should be cause for celebration, the *Fourteenth Report* puts as dour a face on them as it can. Remarkably, the Commission begins by discussing total revenues per voice minute ("RPM"), and bemoans that this metric rose for the first time since 1994, by nine percent, to \$0.07. Although RPM may have been a useful proxy for per unit voice prices years ago when voice services were virtually the only wireless services offered, it is obviously of little, if any, value today, given the explosion of data and messaging services, which account for a large and increasing proportion of overall revenues. It is no wonder the Commission all but concedes, as it must, that RPM has become completely irrelevant as a measure of per-minute voice prices.<sup>101</sup> The only relevant measure – *voice* revenues per voice minute – were in 2008 at a record low (\$0.05), and continued to decline in 2009 to \$0.04. That is the lowest among 26 OECD countries followed by Bank America Merrill Lynch.<sup>102</sup>

The *Fourteenth Report* also refuses to take a position on broadband pricing – perhaps because the news unquestionably would be good. The Commission claims that it lacks the data to make any determinations about pricing trends.<sup>103</sup> But, as noted, elsewhere in the *Fourteenth Report* the Commission shows that wireless broadband data usage has been increasing exponentially as pricing plans remain constant or are falling. Simple mathematics is all that is needed to understand that this cannot have happened unless there have been dramatic declines in per-unit prices, however one defines the units. Thus, it is puzzling why the Commission fails to

increased.... The Cellular CPI has declined by 35.8 percent since December 1997").

<sup>&</sup>lt;sup>101</sup> *Id.* ¶ 189 ("As the contribution of data services to total revenues has increased, RPM has become an increasingly inaccurate measure of the pricing of mobile voice service"). This, of course, is an understatement. Not only is RPM inaccurate, it is biased because it is inaccurate in only one direction – upward.

<sup>&</sup>lt;sup>102</sup> *Id.* Table 40 (2008 per minute voice prices); CTIA Broadband Framework Comments, at 20 (2009 per minute voice prices).

<sup>&</sup>lt;sup>103</sup> Fourteenth Report ¶ 193.

note this clear fact.

2. *Penetration and Net Adds.* The national and regional penetration rates presented in the *Fourteenth Report* are also remarkable. Overall penetration rates as of year-end 2008 were over 90%,<sup>104</sup> and "[i]n 53 of the 160 EAs, the penetration rates exceeded 90 percent, up from 24 EAs at the end of 2007," while "[o]nly two EAs, with a combined population of just 415,000, had penetration rates under 70 percent."<sup>105</sup> In addition, "[s]everal EAs . . . had penetration rates exceeding 100 percent, which is likely due to subscribers having more than one device."<sup>106</sup> The report further confirms that penetration is high among all age groups (*e.g.* 89 percent for ages 65 and over up to 96 percent for ages 18-24).<sup>107</sup> As shown in the CTIA comments filed in this proceeding, penetration rates increased even further for 2009. And, providers continue to rapidly upgrade and expand their networks. In July 2010 alone, AT&T upgraded and expanded its network in several areas, including rural areas.<sup>108</sup>

Here again, however, the Commission focuses on data that does not tell the true story, namely broadband subscribership data from Form 477. That data shows that, as of 2008, there

<sup>&</sup>lt;sup>104</sup> *Id.* ¶ 156.

<sup>&</sup>lt;sup>105</sup> *Id.* ¶ 170.

<sup>&</sup>lt;sup>106</sup> *Id*.

<sup>&</sup>lt;sup>107</sup> *Id.* Chart 17.

<sup>&</sup>lt;sup>108</sup> See, e.g., AT&T Press Release, AT&T Brings 3G Mobile Broadband Network to del Rio 2010), available http://www.att.com/gen/press-23. at (July, room?pid=18169&cdvn=news&newsarticleid=30988&mapcode=Wireless; AT&T Press Release, AT&T Brings 3G Mobile Broadband Network to Hunt County (July, 21, 2010), available http://www.att.com/gen/pressat room?pid=18143&cdvn=news&newsarticleid=30972&mapcode=Wireless; AT&T Brings 3G Mobile Broadband Network to Sulphur Springs (July, 15, 2010), available at http://www.att.com/gen/press-

room?pid=18124&cdvn=news&newsarticleid=30955&mapcode=Wireless; AT&T Brings 3G Mobile Broadband Network to Terre Haute, Indiana (July, 1, 2010), *available at* AT&T Brings 3G Mobile Broadband Network to Terre Haute, Indiana.

were 25 million Americans that subscribed to a wireless broadband plan.<sup>109</sup> But even the Commission acknowledges that this figure is much higher now. Indeed, the *Fourteenth Report* reveals elsewhere (¶ 162) that "mobile wireless data penetration rates . . . were 180 million mobile data subscribers in 2009, which translates into a penetration rate of 63%." This rapid acceleration is itself significant – far more so than one would glean from the *Fourteenth Report* – but the *Fourteenth Report* understate the number of users in 2008, because it does not count customers that have broadband capable devices and use broadband services on a pay-as-you-go basis. In that regard, the Form 477 data indicate that 86 million customers in 2008 had a broadband capable device,<sup>110</sup> the vast majority of which almost certainly use broadband services.

*3. Investment.* Investment by wireless providers is another success story. In 2009, U.S. wireless providers invested more than wireless providers in the five largest European countries combined.<sup>111</sup> But, once again, the Commission puts a negative spin on positive data. It ignores research and development and focuses solely on capital expenditures (*e.g.*, network upgrades and expansion), and it claims that, by some crabbed measures, capital expenditures have been decreasing.<sup>112</sup> These claims are misleading and, in any event, miss the point.

First, the data in the *Fourteenth Report* clearly show that capital expenditures have remained remarkably strong in the wireless industry, notwithstanding the severe recession and despite the fact that investment in other industries has fallen. AT&T, T-Mobile, and Verizon all *increased* their capital expenditures from 2007 through 2009, and the *Fourteenth Report* fails to

<sup>&</sup>lt;sup>109</sup> *Id.* Chart 10. These data are new and, as the Commission points out, are not "directly comparable to mobile wireless high speed connections reported for earlier dates." *Id.* ¶ 158. <sup>110</sup> *Id.* ¶ 158.

<sup>&</sup>lt;sup>111</sup> CTIA May 2010 Wireless Market Statistics, at 8 ("In 2009, U.S. wireless providers invested \$20.4 billion in their currently operational networks alone, compared to \$17.9 billion invested by wireless providers in the five largest European countries.").

<sup>&</sup>lt;sup>112</sup> Fourteenth Report ¶¶ 210-13.

mention that both Leap Wireless and MetroPCS also significantly increased capital expenditures between 2007 and 2009 by 39% (Leap) and 8% (MetroPCS), or that Clearwire increased its capital expenditures over that time period by 223%.<sup>113</sup> Of course, even if that were not the case, there is no reason to expect capital expenditures to increase by the same amount year after year. Capital expenditures tend to be "lumpy." Providers make significant expenditures to upgrade and expand their networks in one year (*e.g.*, perhaps because a new generation of technology has just been introduced), and then focus the next year on signing up customers and integrating those new facilities into their existing networks, and then make additional capital expenditures later, and so on. Minor variations from year to year thus should not be surprising, much less an indication of declining competition.

In any event, the data show that the decrease in overall capital expenditures may be attributable to a single provider – Sprint. Buried at the very end of the "investment" section, Chart 33 shows that capital expenditures have consistently increased since 2006 for AT&T, Verizon and T-Mobile. Sprint is the only provider that, according to the data in the *Fourteenth Report*, has reduced capital expenditures since 2006. As AT&T has previously noted, Sprint, for reasons of its own, has chosen not to invest in its own network and is instead reselling services provided by Clearwire – but the company-specific actions by Sprint provide no reason to question the overall industry's commitment to compete on the basis of upgraded networks.

The *Fourteenth Report* also misinterprets the CTIA data on which it relies. It states that the "data from CTIA suggests that . . . capital investment has been declining over the past four

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<sup>113</sup> See Leap Wireless 2009 and 2008 Annual 10Ks, available at http://phx.corporateir.net/phoenix.zhtml?c=95536&p=quarterlyearnings; MetroPCS 2009 and 2008 Annual 10Ks, http://investor.metropcs.com/phoenix.zhtml?c=177745&p=quarterlyearnings; available at 2009 2008 available Clearwire and Annual 10Ks. at http://investors.clearwire.com/phoenix.zhtml?c=198722&p=irolnewsArticle&ID=1263229&highlight=.

years,"<sup>114</sup> but as CTIA explains, that is not so. The data that CTIA collects and reports include only those expenditures on items that were put into service in that given year. Thus, for example, such data do not reflect the billions of dollars of investments made by providers to upgrade to LTE and other not-yet-activated upgrades and expansions. It also does not include the more than \$33 billion in capital expenditures that providers made to purchase spectrum in the last two auctions.<sup>115</sup> Even with these limitations, as CTIA explains in its comments, incremental capital expenditures for 2009 were higher than in 2008.

4. Service Quality. The Fourteenth Report shows that quality of service is at record high levels, with the number of dropped calls at record low levels.<sup>116</sup> Moreover, it shows that competition has driven providers to make investments to improve service quality such that all providers are now near parity in terms of service quality.<sup>117</sup> A recent Commission survey found that 92 percent of customers were satisfied with their mobile wireless service.<sup>118</sup> AT&T has been a leader on this front even though it has experienced far greater growth in data services than any other provider. For example, a recent report by the Yankee Group found that 73% of AT&T's iPhone users are "very satisfied" with AT&T's network, whereas only 69% of all smartphone customers say they are "very satisfied" with their mobile networks.<sup>119</sup>

<sup>&</sup>lt;sup>114</sup> *Fourteenth Report* ¶ 210.

<sup>&</sup>lt;sup>115</sup> CTIA Broadband Framework Comments, at 21, n.46.

<sup>&</sup>lt;sup>116</sup> Fourteenth Report ¶¶ 222-223.

<sup>&</sup>lt;sup>117</sup> *Id.* ¶ 223.

<sup>&</sup>lt;sup>118</sup> John Horrigan, Ellen Satterwhite, FCC Survey, *Americans' perspectives on online connection speeds for home and mobile devices*, at 1, *available at* http://www.fcc.gov/Daily\_Releases/Daily\_Business/2010/db0601/DOC-298516A1.pdf.

<sup>&</sup>lt;sup>119</sup> David Goldman, *Most iPhone users love AT&T*, CNN Money.com (July 23, 2010), available at

 $http://money.cnn.com/2010/07/23/technology/iphone_4_att/index.htm?source=cnn_bin&hpt=Sbin.$ 

Numerous objective analyses confirm these high consumer satisfaction levels. "The America Customer Satisfaction Index reported that their Overall Business Quality Index from 2004 through 2010 increased only 2% while the wireless industry improved 10.8% in that same span. In 2010, the wireless industry set an all time high in this index for the second straight year. According to JD Power, network quality, retail sales and customer service have all improved year-over-year from 2009 to 2010. The Better Business Bureau reports that, since 2004, the monthly complaint rate for the wireless industry has fallen 22%. And the number of FCC complaints related to marketing, advertising, contracts, early termination fees, network quality, billing, and rates was significantly lower in 2009 than they were in 2008, even as subscribership increased."<sup>120</sup> The number of complaints for the first three quarters of 2009 on non-Telephone Consumer Protection Act related issues was down almost 9 percent from the same period in 2008 – there is less than one such complaint per day for every *five million* customers.<sup>121</sup>

5. "*Profitability*." This year, the Commission for the first time presents (¶¶ 215-224) various measures of wireless industry accounting profits. The Commission acknowledges, however, that accounting profits have extremely limited value because they differ in many respects from any "true measure of economic profit."<sup>122</sup> Accordingly, the Commission explains that it is not drawing any conclusions from the absolute level of its accounting profit metrics, but

<sup>&</sup>lt;sup>120</sup> AT&T Public Policy Blog, "The U.S. Wireless Industry – It's All About the Consumer," July 27, 2010, available at http://attpublicpolicy.com/government-policy/the-u-s-wireless-industry-%E2%80%93-it%E2%80%99s-all-about-the-consumer/.

<sup>&</sup>lt;sup>121</sup> CTIA Wireless Facts, at 1, *available at* http://files.ctia.org/pdf/051710\_-\_Independent\_Assessment\_of\_Wireless\_Industry.pdf. Telephone Consumer Protection Act issues are related to calls from telemarketers and not typically caused by the underlying service provider.

<sup>&</sup>lt;sup>122</sup> Fourteenth Report ¶ 215.

explains that these metrics may be useful for "compar[ing] the performance of mobile wireless segments of different communication[s] providers."<sup>123</sup> The accounting metrics used by the Commission, however, are not useful for even that limited purpose.

The Commission begins its presentation by discussing the problems with using EBIT – earnings before interest and taxes – for anything. The Commission explains, for example, that "as interest payments on debt and corporate income taxes are generally recurrent cash flow obligations, some experts argue that these measures may not always be good estimates of operating cash flow" and that "[f]ederal and [s]tate[] income taxes can be over one-third of pre-tax income and they are deducted [from] most profit formulas."<sup>124</sup> Thus, because EBIT does not account for these significant expenditures that vary widely among firms, EBIT metrics cannot produce apples to apples comparisons among firms, and the Commission explains that "[w]e do not discuss EBIT data in this *Report*."<sup>125</sup>

But the EBITDA metrics – earnings before interest, taxes, depreciation, and amortization – the *Fourteenth Report* uses has all of the same flaws as EBIT. In addition, EBITDA has even more severe problems. As the *Fourteenth Report* explains, depreciation and amortization – the two additional amounts that are left out of the EBITDA metric – are two of the largest costs in highly capital intensive industries like the wireless industry. Depreciation relates to assets such as the tens of thousands of cell towers deployed throughout the country, and amortization reflects annual payments on long term investments, including capital expenditures, which the Commission recognizes are extremely high in the wireless industry.

Consequently, comparing firms within an industry using EBITDA can be valid only if

<sup>123</sup> Id.
<sup>124</sup> Id. ¶ 216.
<sup>125</sup> Id.

one assumes that all firms have made similar capital expenditures (which are paid for via depreciation and amortization), so that omitting depreciation and amortization from the profits metric makes no difference. The Fourteenth Report itself concedes this point: "EBITDA can be a useful measure of [profits]" only "[t]o the extent that capital expenditures are proportionately similar across firms and over time."<sup>126</sup> But the *Fourteenth Report* then goes on to use EBITDA without acknowledging that different wireless providers have indeed incurred different capital expenditures that are proportionately quite different, as it showed elsewhere in its report.<sup>127</sup> Indeed, the Fourteenth Report recognizes that AT&T and Verizon have recently made capital expenditures that far exceed that of Sprint (which has declining capital expenditures) or T-Mobile, and thus it should not be surprising that AT&T and Verizon have higher EBITDAs (which reflect only the earnings from those capital expenditures and ignore the costs of these expenditures) than Sprint or T-Mobile. For these reasons, the Fourteenth Report's comparisons of EBITDA per Subscriber and EBITDA Margins (i.e., EBITDA divided by revenue) are meaningless, because they do not account for the significant differences in interest, taxes, depreciation and amortization among the firms.<sup>128</sup>

<sup>&</sup>lt;sup>126</sup> *Id.* ¶ 217.

<sup>&</sup>lt;sup>127</sup> The *Fourteenth Report* itself documents ( $\P$  213 & Chart 33), for example, that as Clearwire, AT&T, Verizon and others are increasing their capital expenditures, Sprint is reducing its expenditures, and that ( $\P$  219) that there can be significant differences among providers that may reflect "underlying factors including different characteristics of service and product offerings, different customer preferences, different network designs and capabilities, different cost structures, [and] scale economies."

<sup>&</sup>lt;sup>128</sup> In addition, "[t]he differences in EBITDA per subscriber across providers may reflect many underlying factors including different characteristics of service and product offerings, different customer preferences, different network designs and capabilities, different cost structures, scale economies, and the degree of competitive rivalry. The changes in EBITDA per subscriber for individual providers can also reflect changes particular to the provider; for example, acquisitions of networks in mergers or changes in service and product offerings over time. It is possible that some of the correlated changes across providers reflect macroeconomic effects on demand." *Fourteenth Report* ¶ 219.

The *Fourteenth Report* computes EBITDA minus CAPEX per subscriber in an attempt to capture the impact of the vastly different capital expenditures made by the different providers. But this adjustment is insufficient. It still omits interest, taxes and depreciation, all of which the *Fourteenth Report* notes can be significantly different among firms. The *Fourteenth Report* further admits that "EBITDA minus CAPEX does not account for purchases of spectrum licenses, a significant expense of mobile wireless providers," which has also varied greatly among wireless providers.<sup>129</sup>

More importantly, the EBITDA minus CAPEX metric does not properly capture each firm's capital expenditures. The *Fourteenth Report* appears to have simply computed each provider's annual EBITDA and then subtracted each provider's capital expenditures for that year. But this calculation fails to capture the fact that capital expenditures are "lumpy" long term investments – providers may make large capital expenditures in one year and then make much lower ones in subsequent years, while others have the opposite pattern. Furthermore, because *today's* Depreciation & Amortization pays for *yesterday's* capital expenditures, there is no reason to expect that the current CAPEX being subtracted is in any particular proportion to the current Depreciation & Amortization being ignored.

For example, Chart 34 shows that in 2007 AT&T had the second highest EBITDA among the firms in the comparison, but Chart 35 shows that in 2006 AT&T had the *lowest* EBITDA minus CAPEX. That merely shows that AT&T happened to have extraordinarily high levels of capital expenditures in 2006 (as shown elsewhere in the report (Chart 33)). When AT&T later reduced its capital expenditures in 2007, its EBITDA minus CAPEX rose to the highest, and then in 2008 when it increased CAPEX again, it declined to second place. These data thus reflect

<sup>&</sup>lt;sup>129</sup> Fourteenth Report ¶ 218.

only AT&T's lumpy CAPEX over the past few years, not that it was more or less "profitable" than other providers during those years.

Finally, the arbitrariness of the EBITDA, EBITDA minus CAPEX, and EBITDA margin metrics is further illustrated by comparing these statistics for AT&T and Verizon, both of which likely had the most similar capital expenditures over the past few years. In each case, the metric for Verizon significantly exceeds that for AT&T. This may be due to many factors, including for example that portions of Verizon Wireless' earnings and investment costs may be owed or paid by its equity partner, Vodafone, and thus reflected differently in Verizon's EBITDA-based metrics. Examining other industries likewise confirms the arbitrariness of the metrics. For example, in the first quarter of 2010, Ford had an EBIT margin that was more than *double* that of GM, but no reasonable analyst would rely on such a statistic to suggest that Ford has market power or that the automobile industry is not competitive.<sup>130</sup>

6. *ARPU Metrics*. Finally, the *Fourteenth Report* raises questions about changes in "ARPU" – the average revenue received by a provider per customer.<sup>131</sup> ARPU data can be a useful metric when properly examined in context. But if a growing proportion of a provider's customers are purchasing messaging and broadband services in addition to their voice services, ARPU may increase because each customer is now purchasing more services from the provider, even if the per unit prices of voice, messaging and broadband services have all declined.<sup>132</sup>

<sup>&</sup>lt;sup>130</sup> Joann Muller, *GM And Ford Take Different Paths To Profit*, Forbes.com (May 18, 2010), *available at* http://www.forbes.com/2010/05/17/ford-general-motors-chrysler-business-auto-gm.html. (Ford's "operating margin was twice GM's EBIT margin, putting it among the industry's best performers.").

<sup>&</sup>lt;sup>131</sup> *Fourteenth Report* ¶¶ 202-204.

<sup>&</sup>lt;sup>132</sup> As a matter of basic mathematics, ARPU will increase as more users purchase a product. For example, if a provider has 10 customers and 4 of them purchase a \$30 data plan (totaling \$120), then the ARPU would be \$12 (\$120 divided by ten customers). If, in the next year, 8 customers purchase a \$25 data plan, ARPU will rise to \$20, even though the price of the data plan has

Here, the *Fourteenth Report* shows that, according to CTIA data, wireless ARPU declined by about \$2.59 from 2004 to 2007 and remained essentially flat from 2007 to 2008.<sup>133</sup> Updated data from CTIA shows that wireless ARPU dropped precipitously from 2008 to 2009 by nearly \$2.<sup>134</sup> Yet, as shown above, customers continue to purchase more voice, messaging and broadband services than ever before. As a matter of basic mathematics, increased adoption and use can produce declining ARPUs only if prices for voice, messaging, and broadband are falling significantly faster.<sup>135</sup> The ARPU metric thus once again confirms that competition in the wireless marketplace is providing customers with far more services for the same or lower prices.

# **III. PROVIDER AND CUSTOMER CONDUCT FURTHER CONFIRMS THAT THE WIRELESS MARKETPLACE IS INTENSELY COMPETITIVE.**

The *Fourteenth Report* confirms that providers and consumers are behaving in a manner that can only be consistent with intense competition. As discussed below, providers are constantly battling to provide the most desirable bundles of service with the best combination of price, features, coverage, speed, and quality. Providers also continue to make extraordinary investments to upgrade and expand their networks and to develop innovative technologies and service offerings. Consumers are better informed than ever about their alternatives, and they

fallen by \$10.

<sup>&</sup>lt;sup>133</sup> *Id.* Chart 29.

<sup>&</sup>lt;sup>134</sup> CTIA Broadband Framework Comments, at 18 ("As of the end of 2009, the average wireless consumer's bill was \$48.16, in spite of explosive growth in other provided services included as part of the bill such as Internet access, SMS texting, MMS and other new services.").

<sup>&</sup>lt;sup>135</sup> Consider the case of a provider with a single customer. If the customer originally purchased only a voice plan, and then later added a messaging plan and broadband plan, that customer's bill (ARPU) will remain the same or decline only if the combined voice, messaging and broadband plans are priced at the same level as the customer's original voice plan, which means that the prices for each individual component of the service must be lower. Similarly, if the customer originally purchased a voice, messaging and broadband plan, but then substantially increase the use of those services while paying the same amount, then the per unit price for those services must have declined.

readily vote with their feet when they believe another provider will offer them better value.

# A. Provider Conduct Confirms That the Wireless Marketplace Is Highly Competitive.

When examining provider conduct to assess the competitiveness of a marketplace, the Commission assesses the extent to which providers react to price and non-price changes in the offerings of other providers, the extent to which they are investing and innovating to keep up with or surpass their rivals, and the extent to which they are investing in advertising and employing other methods of winning customers from their competitors. In the *Fourteenth Report*, the Commission examined both price rivalry and non-price rivalry, the latter of which includes network investments, advertising and retailing, and handset/application offerings. By these metrics, the provider conduct data presented in *Fourteenth Report* – as well as subsequent data – overwhelmingly establishes that the wireless marketplace is highly competitive.

### 1. Price Rivalry Is Intense In The Wireless Industry.

As shown in Part II, above, wireless providers are continuing to provide more, better and faster services at lower prices. The *Fourteenth Report* separately addressed pricing rivalry for postpaid services and prepaid services and found substantial evidence of intense rivalry.

First, the *Fourteenth Report* details how providers compete by seeking to "further differentiate[] their service plans by attaching additional features to existing plans, without changing core components such as the monthly recurring charge" to give consumers "more value for their money."<sup>136</sup> For example, the report notes AT&T's new bundles that include the "A-List" calling feature that allows customers to designate a list of domestic telephone numbers – mobile or landline – on any network that the customer will be able to call without using any of his minutes allowance. It also discusses the similar innovative offerings from Verizon, Sprint,

<sup>&</sup>lt;sup>136</sup> Fourteenth Report ¶ 90.

and T-Mobile.<sup>137</sup> In addition, although AT&T has had a "bring your own phone" option for years, the report explains that in the year studied Verizon and T-Mobile began offering such options as well.<sup>138</sup>

More generally, however, the *Fourteenth Report* shows that wireless providers are constantly offering customers better handsets and devices, more applications, broader coverage, faster speeds, improved reliability, and better customer service, all at the same or lower prices.<sup>139</sup> In that regard, the *Fourteenth Report* documents wireless competitors' pricing rivalries. The report shows, for example, that T-Mobile introduced significant reductions to its unlimited voice and data plans during this period, and that AT&T and Verizon both responded shortly thereafter with their own "significant" "price cuts."<sup>140</sup> The report documents similar aggressive pricing competition for prepaid services. It explains, for example, that providers initially offered only "European-style"<sup>141</sup> limited-minute pay-as-you-go prepaid plans, but intense competition led to the introduction of unlimited prepaid plans. Prices for these plans subsequently plummeted: "[O]ne analyst estimated that [prices for] all-you-can-eat [prepaid] plans have dropped by as much as 55 percent since the first unlimited national flat-rate calling plan was launched by Verizon Wireless in . . . 2008."<sup>142</sup>

<sup>139</sup> *Id*.

<sup>140</sup> *Id.* ¶ 92.

<sup>141</sup> *Id.* ¶ 99.

 $^{142}$  Id. ¶ 102.

<sup>&</sup>lt;sup>137</sup> *Id*.

<sup>&</sup>lt;sup>138</sup> *Id.* ¶ 97. The *Fourteenth Report* also confirms that wireless roaming average revenues continue to fall. *Id.* Table 21. Indeed, although roaming minutes increased significantly from 2007 to 2008, total revenues were down. *Id.* The *Fourteenth Report* purports to be concerned that total roaming minutes have increased by less than overall minutes. *Id.* ¶ 197. But that merely confirms that providers are continuing to build out their networks and are thus increasingly relying on their own facilities rather than roaming arrangements.

All of these facts are strongly indicative of effective competition. The *Fourteenth Report*, however, instead emphasizes that AT&T's and Verizon's prices for certain unlimited postpaid plans were slightly higher than those of Sprint and T-Mobile. But pricing competition does not mean identical prices. As the analysts cited in the *Fourteenth Report* correctly point out (¶ 92), AT&T and Verizon offer premium services – broader coverage, higher speeds, and higher service quality – and they would therefore be expected to charge slightly higher prices. The more telling fact is that AT&T and Verizon are obviously reacting to price reductions by their rivals.

Moreover, the *Fourteenth Report* leaves out that AT&T has been a leader in cutting prices for other service plans. For example, AT&T's least expensive mass market individual voice plan is \$39.99 per month, and includes 450 Anytime minutes, a subsidized handset, 5000 Night and Weekend minutes, unlimited calls to other AT&T mobile handsets, and – unlike competing offers from T-Mobile and Sprint – Roll Over minutes. AT&T also offers seniors a \$29.99 plan that includes a subsidized handset, 200 monthly minutes, 1000 night and weekend minutes, and unlimited calls to other AT&T mobile handsets, neither of which T-Mobile or Sprint offer. And more recently (after the period covered by the *Fourteenth Report*), AT&T again led the industry by cutting prices for data plans – offering its iPhone and other smartphone users a \$15 plan for customers that use less than 250 megabytes of data.<sup>143</sup>

#### 2. Non-Price Rivalry.

The Fourteenth Report separately examines "non-price rivalry," which is the extent to

<sup>&</sup>lt;sup>143</sup> AT&T Press Release, *AT&T Announces New Lower-Priced Wireless Data Plans to Make Mobile Internet More Affordable to More People* (June 2, 2010), *available at* http://www.att.com/gen/press-

room?pid=17991&cdvn=news&newsarticleid=30854&mapcode=financial.

which providers have invested in "(1) network upgrades; (2) product information and perception, which include[s] advertising and marketing; and (3) downstream product differentiation, including handset/device and application offerings."<sup>144</sup> Again, these metrics show that the wireless marketplace is remarkably competitive.

*Network Upgrades.* The *Fourteenth Report* documents in detail the continued extraordinary investments in network upgrades made by wireless providers, and recent reports confirm that such investments and upgrades continue. The *Fourteenth Report* shows, for example, that "[i]n 2006, EV-DO networks covered 62.6 percent of the U.S. population" and that "[t]oday, they cover nearly all Americans,"<sup>145</sup> HSPA coverage increased from 20 percent coverage in 2006 to more than 76 percent coverage in 2009, <sup>146</sup> and "mobile WiMAX networks, which were effectively non-existent in the *Thirteenth Report*, now cover approximately 28 million people."<sup>147</sup>

Between the *Thirteenth* and *Fourteenth Reports*, Verizon added 44 million POPs to its 3G network, AT&T added 125 cities to its HSPA network with the HSPA 7.2 software upgrade, and T-Mobile expanded its HSPA coverage from 13 markets to 176 cities and began upgrading its HSPA network to HSPA+.<sup>148</sup> Similarly, "[a]s of September 2009, Clearwire's WiMAX service was available in 14 markets covering 10.1 million POPs. Since that time, Clearwire has expanded the WiMAX network to an additional 16 markets and expects to reach 120 million

- <sup>145</sup> *Id.* ¶ 123.
- <sup>146</sup> *Id*.
- <sup>147</sup> *Id.* ¶ 122.
- <sup>148</sup> *Id.* ¶ 116.

<sup>&</sup>lt;sup>144</sup> Fourteenth Report, ¶ 104.

POPs by the end of 2010."<sup>149</sup> Regional operators also expanded and upgraded their broadband networks: for example, Leap Wireless increased its 3G coverage by 36 percent and U.S. Cellular increased its coverage from five markets to 75 percent of its customer base.<sup>150</sup>

As the report notes, providers of all sizes are spending many additional billions of dollars to deploy next-generation broadband networks. As discussed above, AT&T, Verizon, and MetroPCS are all investing billions to upgrade their networks to next generation LTE technology; Cox is also in the process of testing its LTE network ahead of a planned deployment later next year; Clearwire continues to spend more than a billion dollars per year to increase the coverage of its WiMAX network; and satellite companies are spending billions of dollars to rollout of a combined terrestrial (LTE) and satellite based broadband wireless service.

Moreover, providers continue to expand Wi-Fi networks throughout the U.S, and are experience explosive growth in the use of those networks. For example, "AT&T owns and operates the nation's largest Wi-Fi network, with more than 20,000 U.S. hotspots at popular locations like retail stores, restaurants and coffee shops."<sup>151</sup> In the second quarter of 2010 "AT&T handled 68.1 million connections on its public Wi-Fi network – up from 15 million connections in the second quarter of 2009."<sup>152</sup> So far, AT&T customers "made 121.2 million connections in the first half of 2010, already far surpassing the 85.5 million connections made in all of 2009."<sup>153</sup>

<sup>153</sup> *Id*.

<sup>&</sup>lt;sup>149</sup> *Id.* ¶ 117.

<sup>&</sup>lt;sup>150</sup> *Id.* ¶ 114.

<sup>&</sup>lt;sup>151</sup> Press Release, Use of AT&T's Wi-Fi Network Grows to More Than 68 Million Connections in the Second Quarter (July 22, 2010), available at http://www.att.com/gen/pressroom?pid=18147&cdvn=news&newsarticleid=30973&mapcode=consumer.
<sup>152</sup> Id

Advertising and Retailing. The Fourteenth Report also demonstrates that non-price rivalry through advertising and marketing remains extraordinarily high. The Commission tries to paint this in a negative light by emphasizing that the more than \$3 billion that providers spent on advertising may have decreased slightly from 2007 to 2008, and the amount spent by AT&T and Verizon purportedly decreased slightly from 2007 to 2009.<sup>154</sup>

This is a non-issue. The data to which the *Fourteenth Report* refers (¶ 128) show a decline in advertising from 2007 to 2008 from \$3.7 billion to \$3.4 billion. The fact that the wireless industry overall may have slightly reduced spending on advertising as the economy fell into a severe recession should not be terribly surprising or concerning. To the contrary, the surprising thing is how robust the wireless industry's advertising has remained during the recession: as the *Fourteenth Report* later admits, the wireless industry reduced its spending far less than other industries, and the wireless industry moved up from 7<sup>th</sup> to 4<sup>th</sup> place among the industries that spend the most on advertising. Moreover, in 2009 Verizon and AT&T were the  $2^{nd}$  and  $3^{rd}$  largest purchasers of advertising among all U.S. firms, and Sprint was  $7^{th}$ .<sup>155</sup>

In any event, the use of 2007 as the starting point for its analysis skews the results because the 2007 advertising spend was abnormally high, due to several factors. First, the economy was still booming in 2007. Also, in 2007, AT&T dramatically increased its advertising expenditures because of the rebranding of Cingular Wireless as AT&T Wireless, as well as the initial roll-out of the first iPhone. Taking into account that 2007 presented unique circumstances, AT&T has significantly increased its advertising spend each year from 2006 through 2009 – as noted, in 2009, AT&T was the 3<sup>rd</sup> largest purchaser of advertising in the U.S. behind only

 $<sup>^{154}</sup>$  Id. ¶ 128.

<sup>&</sup>lt;sup>155</sup> CTIA Broadband Framework Comments, at 23 (providing data from TNS Media Intelligence).

Verizon (2<sup>nd</sup>) and Procter & Gamble (1<sup>st</sup>).<sup>156</sup>

Equally important, in this instance a drop in absolute spending does not indicate a drop in advertising. As a result of the recession, advertising prices for 2008 and 2009 plummeted,<sup>157</sup> which means that even if the wireless industry spent slightly less in absolute dollars, they purchased *more* advertising overall.

Beyond advertising, the *Fourteenth Report* recognizes that investments in retail distribution of products and services provides further evidence of competition in the wireless marketplace. The *Fourteenth Report* summarizes the myriad distribution points for wireless services – the Internet, provider stores, handset manufacturer stores, Best Buy, Wal-Mart, Target, Costco, RadioShack, and many more. Relevant here, AT&T recently made very substantial additional investments to upgrade AT&T-branded retail outlets to provide customers with an even better experience.<sup>158</sup>

*Handsets and Applications.* The *Fourteenth Report* recognizes that another indication of strong competition among providers is the extent to which they seek to differentiate their products by offering more desirable handsets, operating systems and applications.<sup>159</sup> Here, the statistics set forth in the *Fourteenth Report* speak for themselves. The report shows that there have been *sixty-seven* smartphones launched by more than *two dozen different* U.S. providers

<sup>&</sup>lt;sup>156</sup> *Id*.

<sup>&</sup>lt;sup>157</sup> See, e.g., Jeff Creps, Advertising Prices Are Down, Time to Buy?, SDNN (Dec. 14, 2009), available at http://www.sdnn.com/sandiego/2009-12-14/blog/sponsored-blogs/bizsoup/advertising-prices-are-down-time-to-buy ("a JPMorgan study that looked at the price change of ads across all media in 2009. Of those that were polled in the study, at least 65% of respondents said that the cost of advertising in their desired media had gone down in 2009").

<sup>&</sup>lt;sup>158</sup> See, e.g., AT&T Press Release, AT&T Completes Store Makeover in Time for Back-to-School Shopping (July, 29, 2010), *available at* http://www.att.com/gen/press-room?pid=18183&cdvn=news&newsarticleid=30995.

<sup>&</sup>lt;sup>159</sup> Fourteenth Report ¶ 135.

from March 2008 through January 2010, using a variety of operating systems.<sup>160</sup> And, as discussed above, there have been numerous additional new smartphones released since then, including the iPhone 4, HTC EVO 4G, Droid X, Droid Incredible, among others. By the third quarter of 2009, more than 44 percent of all handset sales were smartphones and 50 percent of all handset upgrades were smartphones (up from 27% and 29%, respectively in the second quarter of 2008).<sup>161</sup>

Innovative handsets, however, are only part of the story. Providers and manufacturers in the U.S. are vigorously competing for a piece of the emerging devices marketplace. This intense competition has spurred a flurry of e-readers, netbooks, GPS turn-by-turn devices, and digital picture frames, and this competition recently produced an entirely new category of wireless devices with the introduction of the iPad in the spring of 2010.<sup>162</sup> And, with these innovative new devices comes more innovation in network and service offerings. AT&T, for one, has developed innovative technologies and service offerings to allow many of these devices (*e.g.*, Amazon Kindle) to come with seamless wireless connectivity out-of-the-box and customers are never required to interact with or directly pay AT&T. The iPad provides another example. With the introduction of the iPad, AT&T developed and deployed an innovative way for consumers to

<sup>&</sup>lt;sup>160</sup> *Id.* App. C, Table C-5: Selected Smartphone Launches in 2008-2009.

<sup>&</sup>lt;sup>161</sup> *Id.* ¶ 137.

<sup>&</sup>lt;sup>162</sup> In July 2010, AT&T announced "that nearly 3.4 million connected devices have been added to the AT&T network in the past three quarters, including roughly 900,000 connected devices in the second quarter. The total number of connected devices on the AT&T network – both emerging consumer devices and machine-to-machine – is nearly 6.7 million." *See, e.g., AT&T Press Release,* AT&T Adds Nearly 900,000 Connected Devices to Network in 2Q; Now Services Nearly 6.7 Million Connected Devices (July 23, 2010), *available at* http://www.att.com/gen/press-room?pid=18149&cdvn=news&newsarticleid=30975. Overall, "AT&T has certified more than 850 specialty consumer and machine-to-machine devices – such as eReaders, netbooks, digital photo frames, personal navigation devices, home security monitoring and smart grid devices – for use on its wireless network." *Id.* 

obtain data connectivity – iPad customers can choose from multiple data plans whenever they like, and they can change or cancel their data plan whenever they like. Moreover, providers continue to rapidly expand the already seemingly endless variety of applications across many handset platforms that hundreds of thousands of applications.

# B. Customer Conduct Confirms That the Wireless Marketplace Is Highly Competitive.

Finally, consumer conduct further confirms that the wireless marketplace is effectively competitive. In the *Fourteenth Report*, the Commission considered two categories of data – consumer "switching costs" and churn<sup>163</sup> – and both sets of data demonstrate that consumers routinely vote with their feet and have the ability to choose the wireless option that best fits their needs.

As the Report documents, consumers have many sources of information about wireless services both from the providers themselves and from numerous third parties.<sup>164</sup> Many providers including AT&T also offer trial periods that permit customers to terminate a new wireless agreement within a certain number of days (AT&T's policy is 30 days) without an ETF.<sup>165</sup> And, as explained above, consumer satisfaction is very high.<sup>166</sup>

Churn rates also remained steady, with overall monthly churn rates in early 2009 increasing slightly to 2.1 percent.<sup>167</sup> These data dramatically confirm, again, that consumers frequently switch providers; indeed, as the Report explains, approximately one quarter of customers switch their service providers every year, and the average "subscriber lifetime" with

- <sup>165</sup> *Id.* ¶ 232.
- <sup>166</sup> *Id.* ¶ 233.

<sup>&</sup>lt;sup>163</sup> *Fourteenth Report* ¶¶ 229-230.

<sup>&</sup>lt;sup>164</sup> *Id.* ¶ 231.

<sup>&</sup>lt;sup>167</sup> *Id.* ¶ 245 & Chart 38; Executive Summary, at 9.

any given provider is only about four years.<sup>168</sup> A 25 percent turnover every year is an obvious real-world demonstration that "switching costs" are minimal, although the Report states merely that these data "provide some indication that some customers are not locked in."<sup>169</sup>

The Executive Summary (but not the Report itself) emphasizes that "[c]hurn rates of the two largest national service providers are half the rates for the next two largest providers,"<sup>170</sup> but this is no cause for concern. The Report shows T-Mobile's churn to be above 3% for the second quarter of 2009, but more recent data shows that T-Mobile had reduced churn to 2.2% as of the first quarter of 2010, a decrease of nearly 33 percent.<sup>171</sup> The report also shows Sprint's churn to be about 3% for the second quarter of 2009, but Sprint just reported a churn rate of 1.85% for the second quarter of 2010, also a nearly 33 percent improvement.<sup>172</sup> Moreover, churn is a function of many factors and will naturally vary from company to company. AT&T and Verizon have for many years been investing billions of dollars in their networks, devices, applications stores, customer care procedures and advertising to maximize customer satisfaction and to reduce churn, and those investments clearly have paid off.<sup>173</sup> Moreover, different providers have different

<sup>&</sup>lt;sup>168</sup> *Id.* ¶ 247-48.

<sup>&</sup>lt;sup>169</sup> *Id.* ¶¶ 244-48.

<sup>&</sup>lt;sup>170</sup> Executive Summary, at 9.

<sup>&</sup>lt;sup>171</sup> T-Mobile Release, *T-Mobile USA Reports First Quarter 2010 Results, available at* http://www.t-

 $mobile.com/Cms/Files/Published/0000BDF20016F5DD010312E2BDE4AE9B/5657114502E70\\FF301288DC2EF2B5271/file/TMUS2010PressRelease-FINALV1[1].pdf.$ 

<sup>&</sup>lt;sup>172</sup> Sprint Press Release, Sprint Nextel Reports Second Quarter 2010 Results (July 28, 2010), *available at* http://investors.sprint.com/phoenix.zhtml?c=127149&p=irolnewsArticle&ID=1452819&highlight=.

<sup>&</sup>lt;sup>173</sup> *Cf.* Sprint Investment Analysis, http://www.wikinvest.com/stock/Sprint\_Nextel\_(S) ("In the past couple of years, Sprint's most pressing problem has been a high churn rate for post-paid subscribers... This has stemmed from Sprint's difficulties integrating its iDEN and CDMA networks, which disrupted Sprint's once stellar customer service, as well as unlimited calling plans by competitors, which have rendered the iDEN network's minute-saving 'push-to-talk'

mixes of postpaid and prepaid customers, and as the Report itself explains (¶ 246), providers will inevitably experience greater churn with prepaid customers than with postpaid customers.

The *Fourteenth Report* devotes most of its analysis to early termination fees ("ETFs") as a possible "switching cost" (¶¶ 234-38), but the Report's discussion of these fees fails to place them in their proper context. AT&T (and other providers) offer customers a variety of ways to buy devices and services. AT&T customers can pay full price for a device – either from AT&T or from a third party – and obtain month-to-month service from AT&T with no ETFs, or they can purchase a subsidized device from AT&T in return for making a term commitment subject to a prorated ETF. AT&T also offers prepaid service with "Pay as You Go" that requires no credit check, no contract and no ETF. With the "bring your own phone" option, a customer with a compatible device also can sign up for month to month postpaid service with no contract, no ETF and no device purchase.

AT&T customers clearly understand that they have choices – indeed, AT&T has millions of month to month and prepaid subscribers. To be sure, most AT&T customers choose the subsidized (with ETF) option, because it is an extremely good deal. It allows the customer to obtain an expensive cutting edge device at a very low up-front cost, in exchange for a one or two year contract with a pro-rated ETF (which is sometimes less than the subsidy given by AT&T).<sup>174</sup> As such this purchasing option has undoubtedly played a key role in the dramatic

capability obsolete. In the first half of FY2009, Sprint lost roughly 1.15M iDEN post-paid customers."); Matt Ablott, *How do you solve a problem like T-Mobile USA?*, Mobile Business Briefing (May 26, 2010), *available at http://www.mobilebusinessbriefing.com/article/how-do-you-solve-a-problem-like-t-mobile-usa-* ("T-Mobile USA has long being playing catch-up on this front. It didn't even begin rolling-out 3G until 2008, by which point its main rivals had already outlined their plans to move to so-called 4G technologies: LTE in the case of Verizon and AT&T, WiMAX at Sprint.").

<sup>&</sup>lt;sup>174</sup> See also Fourteenth Report ¶ 236 (noting that providers had explained that "ETFs allow them to subsidize handset purchases – including purchases of smartphones – for customers; and that

expansion of wireless services in the United States with more than 270 million subscribers.

AT&T has previously explained the many benefits to both consumers and providers of giving consumers the option of purchasing handsets at discounted prices in return for a term commitment with an ETF: "First, for many consumers, the high retail cost of wireless equipment would make wireless service unaffordable. Second, wireless providers value the predictability of term commitments. This predictability helps providers plan and manage networks. Term commitments also provide a predictable revenue stream that helps fund capital investment. In the aggregate, term commitments also allow providers to reduce the price of service to all subscribers because they reduce providers' acquisition and retention costs and increase the number of users on the network, allowing providers to reduce operating costs through economies of scale. ETFs make this bargain – bundled discounts in exchange for term commitments – more efficient by giving consumers an option to reduce their contractual obligations while providing providers with enough predictability to make it reasonable to discount device prices in exchange for a service commitment."<sup>175</sup>

Finally, the Commission notes (¶ 233) that it is considering new regulations that would require providers to provide certain kinds of information or usage alerts, and the press releases accompanying the Report pointedly note that the Commission is considering regulations to combat "bill shock." As AT&T has explained in that docket, AT&T already provides consumers numerous ways to track and monitor their usage, including courtesy alerts when a customer

wireless providers normally recover those subsidies over the life of a contract, but cannot do so when a customer ends a contract early.").

<sup>&</sup>lt;sup>175</sup> Letter from Robert W. Quinn (AT&T) to Joel Gurin and Ruth Milkman (FCC), *Re: AT&T's Early Contract Termination Policy*, CG Docket No. 09-158, at 10 (Feb. 23, 2010).

reaches 65% and 90% of their data plan's limit.<sup>176</sup> Although the European Union adopted certain "bill shock" rules in 2009, those regulations govern only intra-EU roaming charges, which can be high; mandating similar types of measures in this country will only stifle innovative pricing and terms.<sup>177</sup>

<sup>&</sup>lt;sup>176</sup> Comments of AT&T Inc., Measures Designed to Assist US Wireless Consumers to Avoid Bill *Shock*, CG Docket No. 09-158, at 2 (July 6, 2010). <sup>177</sup> *Id.* at 2 & n.4.

### CONCLUSION

For the foregoing reasons, the Commission should find in the Fifteenth Report that wireless markets are intensely competitive.

Respectfully Submitted,

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