

**TESTIMONY OF KATHLEEN O'BRIEN HAM,  
VICE PRESIDENT, FEDERAL REGULATORY AFFAIRS,  
T-MOBILE USA, INC.**

**on**

**“AN EXAMINATION OF COMPETITION IN THE WIRELESS MARKET”**

**before the**

**ANTITRUST, COMPETITION POLICY AND CONSUMER RIGHTS SUBCOMMITTEE  
SENATE COMMITTEE ON THE JUDICIARY**

**February 26, 2014**

**TESTIMONY OF KATHLEEN O'BRIEN HAM  
VICE PRESIDENT, FEDERAL REGULATORY AFFAIRS,  
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**Introduction**

Good morning Chairwoman Klobuchar, Ranking Member Lee and Members of the Subcommittee, and thank you for inviting me to testify on the subject of wireless competition. My name is Kathleen Ham, and I have been Vice President of Federal Regulatory Affairs for T-Mobile US (“T-Mobile”) since 2004. In my position at T-Mobile I am responsible for managing the company’s regulatory activities at the federal level. Prior to joining T-Mobile, I worked for 14 years at the Federal Communications Commission (“FCC” or “Commission”) in a number of top policy positions, including Deputy Chief of the Wireless Telecommunications Bureau. I have also served on the Spectrum Management Task Force and was involved in the intergovernmental advisory committee that negotiated the allocation of third generation (3G) wireless spectrum.

Headquartered in Bellevue, Washington, T-Mobile offers nationwide wireless voice and data services to individual, business and government customers. T-Mobile is the fourth largest wireless carrier in the U.S. and serves approximately 46.7 million customers.

T-Mobile has a strong commitment to competition, innovation, and customer service. The most recent J.D. Power survey of satisfaction with customer service in the U.S., for example, ranked T-Mobile as the most improved wireless carrier in the survey, and our pre-paid MetroPCS brand was ranked first in consumer satisfaction among pre-paid wireless carriers.<sup>1</sup> T-Mobile has consistently ranked among the top 100 most military-friendly employers, is cited as one of the 20 best places for college graduates to work,

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<sup>1</sup> See “2014 U.S. Wireless Customer Care Full-Service Performance Study and U.S. Wireless Customer Care Non-Contract Performance Study—Vol. 1,” J.D. Power (Feb. 6, 2014), *available at* <http://www.jdpower.com/content/press-release/2r1A1q4/2014-u-s-wireless-customer-care-full-service-performance-study-and-u-s-wireless-customer-care-non-contract-performance-study-vol-1.htm> (last accessed Feb. 16, 2014); *see also* Blair Hanley Frank, “T-Mobile Improves in J.D. Power Customer Satisfaction Survey, AT&T Tops Verizon,” GeekWire (Feb. 6, 2014), *available at* <http://www.geekwire.com/2014/t-mobile-moves-j-d-powers-satisfaction-survey-att-unseats-verizon/> (last accessed Feb. 16, 2014).

and has been recognized in each of the last four years as one of the world's most ethical companies by the Ethisphere Institute.<sup>2</sup>

Over the past year T-Mobile has been competing aggressively to make up for its disadvantages in comparison to AT&T and Verizon. A year ago, T-Mobile had virtually no 4G LTE network; today, our LTE network covers over 200 million people and is still growing. And although built quickly, it is a very high quality network. For example, according to recent speed tests, our network is the fastest in the country in terms of download and uploads speeds and boasts the lowest latency figures in the wireless industry as well.<sup>3</sup> Since 2013 T-Mobile has been growing fast in comparison to other wireless companies. In the fourth quarter of 2013 alone, we added 1.6 million customers, with 869,000 of those being branded postpaid customers.<sup>4</sup> That was our third consecutive quarter with more than 1 million net customer additions, representing a significant turnaround from a year earlier. In 2012, T-Mobile posted a net loss of over 2 million branded postpaid customers, while a year later in 2013, we added 2 million such customers; in total we added more than 4.4 million customers in 2013, compared to losing 256,000 customers in 2012—a positive swing of 4.7 million customers in one year.<sup>5</sup> In the last quarter of 2013 we also delivered our third consecutive quarter of sequential service revenue growth.<sup>6</sup> In the fourth quarter of 2013, T-Mobile's total revenue amounted to \$6.8 billion, more than 10% higher than the revenue

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<sup>2</sup> See Company Information—Awards, T-Mobile USA, Inc., available at [http://www.t-mobile.com/Company/CompanyInfo.aspx?tp=Abt\\_Tab\\_Awards](http://www.t-mobile.com/Company/CompanyInfo.aspx?tp=Abt_Tab_Awards) (last accessed Feb. 15, 2014).

<sup>3</sup> See “Customer Data Proves T-Mobile Network Now Fastest 4G in the U.S.,” T-Mobile Investor Relations (Jan. 8, 2014), available at <http://investor.t-mobile.com/mobile.view?c=177745&v=203&d=1&id=1889227> (last accessed Feb. 19, 2014); See “3G/4G Wireless Network Latency: How Did Verizon, AT&T, Sprint and T-Mobile Compare in January?” Fierce Wireless (Feb. 20, 2014), available at <http://www.fiercewireless.com/special-reports/3g4g-wireless-network-latency-how-did-verizon-att-sprint-and-t-mobile-compa-1> (last accessed Feb. 21, 2014).

<sup>4</sup> “T-Mobile US Reports Fourth Quarter and Full Year 2013 Results and Third Consecutive Quarter of Over One Million Net Customer Additions,” T-Mobile (Feb. 25, 2014) (“T-Mobile 4Q13 Press Release”), available at <http://investor.t-mobile.com/Cache/1500056771.PDF?Y=&O=PDF&D=&fid=1500056771&T=&iid=4091145> (last accessed Feb. 25, 2014).

<sup>5</sup> See T-Mobile 4Q13 Press Release.

<sup>6</sup> See *id.*

posted for the fourth quarter of 2012 and 2.1% higher than the revenue generated in the third quarter of 2013.<sup>7</sup> At the same time the two largest carriers account for most of the industry's profits.

T-Mobile's recent accomplishments are the more remarkable because we have been operating not only with a scale disadvantage to our larger competitors, but also with virtually no low-band spectrum, which, in the words of AT&T's CEO, "propagates like a bandit," permitting efficient coverage both inside buildings in urban areas and across large suburban and rural areas.<sup>8</sup> In other words, without low-band spectrum, we have been competing with one arm tied behind our back. We need the vigilance of Congress and regulators to ensure that T-Mobile has access to the spectrum resources necessary to remain competitive. Today's consumers expect high speed broadband coverage everywhere they go, and T-Mobile will face increasing challenges satisfying that demand without low-band spectrum. Indeed, today we have about 40% more cell sites than Verizon, but because Verizon has deployed its network using below 1 GHz spectrum, its geographic service footprint is broader. In addition, T-Mobile faces other critical competitive challenges that U.S. policymakers can impact: among them are securing access to roaming at commercially reasonable rates; interconnection with the other major carriers as we move to an all-Internet Protocol ("IP") world; and backhaul from our cell sites, especially outside of major metropolitan areas. The U.S. wireless market is already dominated by the two largest carriers, and absent a realistic opportunity to acquire low-band spectrum and these other, critical inputs, T-Mobile's ability to continue as an effective force in the long term could be threatened.

### **T-Mobile is a Consumer-Focused Competitor**

When our CEO, John Legere, joined the company in 2012, he expressed a desire to fix the broken wireless service business model and make the wireless experience more enjoyable for consumers. To do that, he turned to the people with the clearest ideas about what was wrong—the customers themselves. To identify consumer pain points, he made his e-mail address available publicly, invited consumer comments, and then read every message; sat in on calls to our service centers; and took to social media.

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<sup>7</sup> See T-Mobile US Q4 and Full Year 2013 Slide Presentation (Feb. 25, 2014).

<sup>8</sup> AT&T's Randall Stephenson on the Network's Strength, CNN MONEY (July 18, 2012), *available at* <http://tech.fortune.cnn.com/2012/07/18/randall-stephenson-att/> (last accessed July 19, 2013).

Based on this consumer feedback, last spring we launched our “Un-carrier” campaign, consisting of four major initiatives.<sup>9</sup>

### **Un-carrier 1.0—Simple Choice Service Plan**

First, in March 2013, we eliminated the annual service contract and replaced it with a program we call Simple Choice. The idea was to make wireless simpler for consumers by eliminating long-term service contracts and uncoupling the cost of a mobile device from monthly service charges. Our message to consumers was: If you don’t like our service this month, you can drop us. No contracts, no early termination fees (“ETFs”). And our message to our competitors was: we don’t need service contracts or penalties to keep our customers loyal. Unlike other providers, who hide the real cost of a handset by including it as part of a monthly contract price and then continuing to charge that inflated price even after the full cost of the device is paid off, T-Mobile embraced a transparent pricing model. T-Mobile customers can bring their own devices to our network; or they can buy a phone from us either upfront in full, or pay for it over 24 months on an interest-free installment plan, with a low or often no upfront payment—and in all cases pay a low monthly fee for service without an annual contract. Once the phone is paid for they enjoy a drop in their monthly charges, while with a traditional two-year contract plan the extra charges embedded in the monthly rate to cover the handset subsidy continue even after the cost of the phone has been fully recovered.

### **Un-carrier 2.0—JUMP Program**

The next step, in July 2013, was to introduce a new device upgrade program: the JUMP—“Just Upgrade My Phone”—program. JUMP was designed to attack what our CEO has described as the “single most offensive practice” in the wireless industry: the imposition of rules severely restricting when a consumer can upgrade to a new phone. Rather than forcing consumers to sit on the sidelines for two years—730 days—watching phones come out that they cannot have under the terms of their wireless contracts, JUMP allowed them to upgrade their devices as frequently as twice a year, with no upgrade fee

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<sup>9</sup> For a summary of the ideas behind the Un-carrier initiatives, *see* “Why T-Mobile,” *available at* <http://www.t-mobile.com/landing/whyt-mobile.html> (last accessed Feb. 13, 2014).

after six months. The program lets consumers adopt the newest, most innovative technologies when they want without suffering a financial penalty. It also serves as an extended warranty, allowing them to replace their phones if they are lost or stolen, or damaged. Just this week, we launched a shift in the JUMP plan that removes the annual limit on the number of times a consumer can upgrade his or her device, and adds tablets to the offer, as long as the consumer has paid at least half of the original value of the phone or tablet at the time of the upgrade.<sup>10</sup>

### **Un-carrier 3.0/3.1—Simple Global/Tablets Un-leashed**

Our next Un-carrier initiative, announced last October, addressed one of the major “pain points” for U.S. wireless consumers who travel abroad—the exorbitant cost of international roaming. Consumers want to take their phones everywhere, but often leave their devices off or in airplane mode when traveling overseas because of anxiety about bill shock from international roaming charges when they return home. So T-Mobile added free, unlimited international data and text for U.S. customers on post-pay Simple Choice plans when travelling to over 100 countries. The data available when traveling abroad is 2G, not broadband, but is more than sufficient to allow consumers to send and receive e-mails and texts, do simple web browsing, access most apps (e.g., check the weather) and use social media; plus, higher speed services are available for those who want them in the form of short-term “passes” at a reasonable cost. Our customers can also make inexpensive voice calls while roaming internationally at \$0.20 per minute.

For our next Un-carrier offering, T-Mobile took on a problem that prevents 90% of consumers who own tablets in the U.S. from signing up for a mobile data plan: concern that mobile tablet connections could mean very high mobile data charges. To address this concern, T-Mobile launched Tablets Un-Leashed, becoming the first national wireless carrier to offer tablet owners up to 200 MB of free 4G LTE data every month for as long as they own their device. To put this in context, this allows T-Mobile customers to send about 800 Instagram photos, or 2,500 e-mails, or stream 200 minutes of

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<sup>10</sup> T-Mobile JUMP (Feb. 23, 2014), *available at* <http://www.t-mobile.com/phone-upgrade.html> (last accessed Feb. 25, 2014); Mike Sievert, “One-Upping Our Own Industry-Leading Upgrade Program” (Feb. 24, 2014), *available at* [http://multimediacapsule.thomsonone.com/t-mobileusa/blog\\_one-upping-our-own-industry-leading-upgrade-program](http://multimediacapsule.thomsonone.com/t-mobileusa/blog_one-upping-our-own-industry-leading-upgrade-program) (last accessed Feb. 25, 2014).

music—all for free. Customers who need more than 200 MB can sign up for a day or week pass, or add an extra 500 MB of data for \$10 a month. Customers on a Simple Choice tablet plan also get unlimited data in over 100 countries internationally at no additional cost.

### **Un-carrier 4.0—Contract Freedom**

In our most recent effort to address consumer pain points creatively, in January 2014 we launched the Un-carrier 4.0 program. This offer provides up to \$350 in early termination fees for individuals and families who switch from AT&T, Verizon or Sprint to T-Mobile. It includes an instant additional credit of up to \$300 for a trade-in on the consumer's current device, which is also available to T-Mobile customers. We like to think of Un-carrier 4.0 as a “get out of jail free card” for families that have been bound to their existing carrier by staggered contract end dates and high ETFs.

### **T-Mobile's Pro-Consumer Un-carrier Initiatives Are Proving Popular**

T-Mobile's innovative Un-carrier strategy is not just a marketing ploy—it is a commitment to address the real needs of wireless consumers. After a year of fresh takes on wireless services, consumers are responding. As noted above, we added more than 4.4 million new subscribers in 2013, including 1.6 million in the fourth quarter, versus losing 256,000 customers in 2012. In the fourth quarter of 2012, we reported customer churn of 2.5%, which dropped to 1.7% a year later.<sup>11</sup> In just a year, we have come a long way.

Of course, none of the success of our Un-carrier initiative would have been possible without a fast and reliable network. Within the past year we deployed a state-of-the-art LTE network covering more than 200 million people. Due to spectrum constraints, our LTE network deployment started initially with only a 5X5 MHz spectrum block, but now the vast majority of that network operates on at least a 10X10 MHz configuration. We intend to allocate at least 20X20 MHz for LTE in the majority of the top 25 U.S. markets by the end of 2015, and have already started 20X20 MHz LTE service in Dallas, which allows customers to experience top download speeds of up to 150 Mbps. As more of our spectrum has

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<sup>11</sup> “T-Mobile USA Reports Fourth Quarter 2012 Operating Results,” T-Mobile (Feb. 27, 2013), *available at* <http://newsroom.t-mobile.com/phoenix.zhtml?c=251624&p=irol-newsarticle&ID=1802273> (last accessed Feb. 22, 2014); T-Mobile 4Q13 Press Release.

migrated to LTE use, our network data speeds have increased significantly and the service options available to our customers have expanded, although in the long run we can only maintain such a competitive network if we acquire low-band spectrum.

We also have expanded our pre-paid MetroPCS service since acquiring MetroPCS in May 2013. It had taken MetroPCS 10 years to enter 15 markets when we acquired the company. In the mere 10 months since that acquisition, we expanded the MetroPCS brand to an additional 30 markets, bringing this flexible and increasingly popular pre-paid mobile broadband service option to millions more people across the country. Thanks to a migration that exceeded expectations, approximately 3.5 million new and existing MetroPCS customers now enjoy a better wireless broadband experience on the T-Mobile network.<sup>12</sup>

### **Despite Its Recent Success, T-Mobile Faces Significant Challenges to Remaining a Strong Competitive Force in the Market**

Despite its popularity with consumers, T-Mobile faces a number of fundamental challenges that put at risk its ability to maintain its disruptive presence in the marketplace. Among those are the significant scale advantages enjoyed by our two major competitors. Verizon and AT&T have over 96 million<sup>13</sup> and 110 million<sup>14</sup> wireless subscribers respectively. In T-Mobile's case, although our subscriber base is growing, we still have fewer than 47 million subscribers.<sup>15</sup> This smaller scale yields lower profit margins, smaller cash flows, and greater challenges in funding bold and disruptive innovations, and increases the difficulty of meeting the maintenance costs and capital expenditures associated with developing, expanding and supporting a national network. By contrast, our larger competitors have

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<sup>12</sup> T-Mobile 4Q13 Press Release.

<sup>13</sup> See Verizon Caps Strong Record of Success in 2013 with Fourth Consecutive Quarter of Double-Digit Earnings Growth (Jan. 21, 2014), *available at* [http://www.verizon.com/investor/news\\_verizon\\_caps\\_strong\\_record\\_of\\_success\\_in\\_2013\\_with\\_fourth\\_consecutive\\_quarter\\_of\\_doubledigit\\_earning.htm](http://www.verizon.com/investor/news_verizon_caps_strong_record_of_success_in_2013_with_fourth_consecutive_quarter_of_doubledigit_earning.htm) (last accessed Feb. 24, 2014).

<sup>14</sup> See AT&T 10-K (Feb. 21, 2014), *available at* <http://phx.corporate-ir.net/phoenix.zhtml?c=113088&p=irol-SECText&TEXT=aHR0cDovL2FwaS50ZW5rd2l6YXJkLmNvbS9maWxpbnmcueG1sP2lwYWdlPTk0MTM4NDQmRNFUT0wJINFUT0wJINRREVTQz1TRUNUSU9OX0VOVEISRSZzdWJzaWQ9NTc%3d> (last accessed Feb. 21, 2014).

<sup>15</sup> T-Mobile 4Q13 Press Release.



substantial economies-of-scale advantages in such critical areas as equipment purchasing, handset roll-out, business financing, the acquisition of backhaul and roaming services, and national brand advertising. The funding requirements needed for this business, exacerbated by the lack of scale relative to the big two, remain a major competitive challenge to T-Mobile going forward. In addition to these structural disadvantages, T-Mobile faces a number of other challenges in areas where important decisions are currently pending before government regulators. These include access to spectrum, and particularly low-band spectrum; dependence on other carriers' networks for roaming, including data roaming; the need to negotiate efficient interconnection agreements in an increasingly all-IP world; and access to broadband backhaul on reasonable terms and conditions.

There are three important issues to consider relating to our need for low-band spectrum. First, we, like our wireless industry competitors, believe that Congress and regulators should do all they can to encourage widespread broadcaster participation in the incentive auction. The need for additional spectrum, driven by explosive growth in the amount of wireless data traffic, has affected all wireless carriers, and the most effective way to address that need is to make as much new commercial spectrum available as possible. Second, it is critical that the FCC adopt a band plan for the incentive auction that maximizes the amount of paired spectrum available for licensed wireless broadband services. While there were originally differences of opinion on this point, the wireless industry is now close to a consensus, with T-Mobile and Verizon jointly leading the way. Finally, the Commission must adopt reasonable spectrum aggregation limits to ensure that the two dominant wireless carriers do not foreclose other competitors, as the Department of Justice ("DOJ") has warned could happen. Again, there is agreement among all major parties that no single bidder should be able to win all of the spectrum offered in the broadcast incentive auction. T-Mobile believes that no two parties should be able to acquire all of the spectrum. No one is trying to exclude any provider from the auction; we simply want to ensure that a reasonable amount of spectrum is available for all bidders.

T-Mobile's dearth of low-band spectrum is a significant competitive disadvantage. Spectrum is the lifeblood of the wireless industry, and spectrum below 1 GHz is especially critical for any wireless

provider to be competitive. There is a reason why low-band spectrum is used for television broadcasting—it offers superior building penetration and broader coverage than the higher band spectrum T-Mobile currently uses. In a recent filing with the FCC, the DOJ reminded the Commission that rules ensuring that smaller carriers have realistic access to low-band spectrum “could improve the competitive dynamic among nationwide carriers and benefit consumers.”<sup>16</sup> Internationally, the qualitative difference between high- and low-frequency spectrum has been recognized by analysts and regulators, and formed the basis for policies ensuring that incumbent providers are not able to acquire the bulk of this valuable spectrum and hinder the growth of competitive carriers.<sup>17</sup>

T-Mobile has experienced firsthand the challenges associated with deploying a nationwide network using spectrum above 1 GHz. As noted above, in 2013 T-Mobile completed an aggressive rollout of its nationwide 4G LTE network, ultimately surpassing our goal of reaching 200 million people in forty-three of the top fifty markets.<sup>18</sup> While we are proud of that accomplishment, achieving that level of coverage was significantly more expensive than it would have been had T-Mobile been able to deploy using below 1 GHz spectrum. Having access to low-band spectrum enables other wireless carriers to increase the coverage of their networks, which, among other benefits, provides increased revenue for further network investment. Without access to sufficient low-band spectrum, T-Mobile has been forced to deploy much denser infrastructure, which can add considerable delay and expense to the network deployment process.

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<sup>16</sup> *Ex Parte* Submission of the United States Department of Justice, *Policies Regarding Mobile Spectrum Holdings*, WT Docket No. 12-269 at 1 (filed Apr. 11, 2013).

<sup>17</sup> See Letter from Rebecca Murphy Thompson, General Counsel, Competitive Carriers Association to Marlene H. Dortch, Secretary, Federal Communications Commission, WT Docket No. 12-269, Docket No. 12-228 at 2 (filed Sept. 4, 2013).

<sup>18</sup> T-Mobile USA, Inc. Investor Relations, “Customer Data Proves T-Mobile Network Now Fastest 4G LTE in the U.S.” (Jan. 8, 2014), available at <http://investor.t-mobile.com/mobile.view?c=177745&v=203&d=1&id=1889227> (last accessed Feb. 13, 2014).

T-Mobile has started the process of acquiring low-band spectrum by entering into a spectrum purchase and swap with Verizon for some 700 MHz A Block spectrum licenses.<sup>19</sup> The application for this transfer is pending before the FCC, and T-Mobile hopes the Commission will act promptly and allow it to begin deploying the spectrum. Although our acquisition of 700 MHz A Block spectrum will be helpful if approved, it will not be sufficient to allow T-Mobile to overcome the spectrum advantages of the incumbent providers and satisfy growing consumer demand. If the transaction is approved, T-Mobile will acquire 12 MHz of below 1 GHz spectrum covering roughly half of the U.S. population, increasing our population weighted average holdings of low-band spectrum from 0.3 MHz to approximately 6 MHz. By comparison, AT&T and Verizon each holds about 50 MHz of below 1 GHz spectrum, giving them a significant competitive advantage in terms of network coverage and building penetration.<sup>20</sup> Some experts estimate that AT&T and Verizon hold approximately 75% of the commercial spectrum below 1 GHz, including 86% in the top 10 U.S. markets, and over 80% in the top 50 markets.<sup>21</sup>

The need for growth, fueled by demand for high-quality services that are available inside buildings and over broad coverage areas, will only increase as consumer demand for wireless services intensifies. Consumer demand is not merely limited to smartphone use, but extends to the wide variety of wireless devices available today. Consumers expect to be able to access mobile broadband whenever they want and wherever they are, whether they are a passenger in a car going 60 miles an hour or sitting in their basement family room. Demand on our network is increasing every day, and we need additional low-band resources to satisfy this demand.

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<sup>19</sup> See T-Mobile USA, Inc. and Celco Partnership d/b/a Verizon Wireless Seek FCC Consent to the Assignments and Exchange of Lower 700 MHz, Advanced Wireless Service, and Personal Communications Service Licenses, *Public Notice*, DA 14-163 (rel. Feb. 7, 2014).

<sup>20</sup> See Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Mobile Conditions with Respect to Commercial Mobile Services, *Sixteenth Report*, WT Docket No. 11-186, ¶ 118 (rel. Mar. 21, 2013); Verizon and T-Mobile Assignment Applications, ULS File Nos. 0006090675, 0006090661 (filed Jan. 10, 2014).

<sup>21</sup> See Comments of Sprint Nextel Corporation, *Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, GN Docket No. 12-268 at 2 (calculating figures based on data in the FCC's Universal Licensing System ("ULS") as of Nov. 28, 2012) (filed Jan. 25, 2013). This number does not take into account the spectrum swap between T-Mobile and Verizon, which if approved by the FCC will slightly increase T-Mobile's national percentage of low-band spectrum.

The FCC has scheduled the incentive auction of this type of “beachfront” sub-1 GHz broadcast spectrum for mid-2015. As noted by the DOJ, however, the other major wireless carriers will have a strong business incentive to bid at supracompetitive levels during the auction merely to keep their smaller competitors, including T-Mobile, from acquiring additional low-band spectrum. The competitive advantage enjoyed by the two largest carriers from their dominant position in low-band spectrum is so significant, that they would arguably be doing their shareholders a disservice if they failed to bid as high as possible to acquire all of the spectrum being made available in the auction. T-Mobile therefore asks you to help ensure that the FCC adopts rules for the upcoming spectrum incentive auction that include reasonable spectrum aggregation limits, to prevent the dominant wireless providers from foreclosing smaller carriers like T-Mobile from acquiring below 1 GHz spectrum. Spectrum aggregation limits of this nature have been successful in the past in promoting and protecting wireless competition. In fact, it was the FCC’s decision to put reasonable limits on the amount of PCS spectrum that could be acquired by the two incumbent cellular carriers that led to the development of real competition in mobile services for the first time in the late 1990s. It is fair to say that the mobile industry would look vastly different if the FCC had not made clear that there would be a pro-competitive distribution of spectrum in the PCS auctions. To cite just one example close to home, T-Mobile traces its roots back to the PCS auctions and likely would not exist today but for the pro-competitive spectrum-aggregation limit in effect at the time. Moreover, following those auctions, countries around the world quickly emulated the U.S. both in making more spectrum available for mobile services and in adopting rules to ensure that the dominant mobile carriers in their country could not win all of the licenses.

Other factors critical to T-Mobile’s ability to remain competitive include our need to negotiate commercially reasonable rates for data roaming, interconnection, and backhaul agreements with the other major carriers or their affiliates. Data roaming allows wireless customers to automatically receive data services when they are outside of the area covered by their “home” provider’s network, while interconnection agreements allow a caller using the service of one network provider to connect to the network of a called party who subscribes to another service provider. Backhaul provides the critical

connection between our cell sites and switches (the gateways to the rest of our network), and in a 4G LTE world, these “pipes” must themselves have broadband capacity or the whole network experience deteriorates for the user. Access to these inputs are critical to competition in today’s wireless market, and competitive carriers’ ability to obtain critical access to these services could be threatened absent continued vigilance by Congress and regulators.

On roaming, T-Mobile appreciates the FCC’s actions to require carriers to offer both voice and data roaming, which the D.C. Circuit Court of Appeals has upheld.<sup>22</sup> While adoption of this requirement was an important first step, difficulties remain in reaching commercially reasonable terms for roaming with the other major wireless providers. Active FCC oversight may well be needed to ensure that carriers have financially realistic access to data roaming services. The other major wireless carriers should not be allowed to continue their practice of making it difficult, time-consuming and expensive to secure commercially reasonable rates for data roaming.

Similarly, T-Mobile’s future depends on its ability to negotiate interconnection agreements with other major carriers. Interconnection rules must survive the IP transition, to ensure that all providers are able to offer their customers the ability to connect to the customers of other providers. As the FCC has explained, interconnection is crucial because any given subscriber takes service directly from only one carrier, requiring interconnections to all other networks to reach other carriers’ subscribers.<sup>23</sup> FCC Chairman Wheeler has stressed the importance of interconnection during the IP transition by including it as part of the interlocking basic rights of consumers and responsibilities of network providers he has dubbed the “network compact.”<sup>24</sup> The FCC should clarify its rules to ensure that interconnection is mandatory between all providers and technologies, to ensure that incumbent providers are not able to shut

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<sup>22</sup> See Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers and Other Providers of Mobile Data Services, *Second Report and Order*, 26 FCC Rcd 5411 (rel. Apr. 7, 2011); *aff’d sub nom. Cellco Partnership v. FCC*, 700 F.3d 534 (D.D.C. 2012).

<sup>23</sup> See Connect America Fund *et al.*, *Report and Order and Further Notice of Proposed Rulemaking*, 26 FCC Rcd 17663, 18123-24 ¶ 1336 (2011).

<sup>24</sup> See Prepared Remarks of Tom Wheeler, Computer History Museum, Mountain View, California (Jan. 9, 2014), available at [http://transition.fcc.gov/Daily\\_Releases/Daily\\_Business/2014/db0117/DOC-325054A1.pdf](http://transition.fcc.gov/Daily_Releases/Daily_Business/2014/db0117/DOC-325054A1.pdf).

out smaller carriers and innovative technologies that offer consumers options that may be superior to the status quo.

Finally, access to reasonably priced backhaul is necessary to allow T-Mobile to provide its customers with a fast, reliable connection to the global communications network. Reasonably priced backhaul is especially critical in rural and suburban areas, where incumbent providers have a significant market share and often no reasonable alternatives are available. For T-Mobile to successfully expand its network into less densely-populated areas where coverage can be sparse, it must have access to backhaul at reasonable rates.

### **Conclusion**

As the Un-carrier in the wireless market, T-Mobile is providing new options for consumers tired of high prices, low levels of innovation and inflexibility among their service providers. Heightened competition means better service and more options, and leads to a virtuous cycle of innovation and adoption, with consumers the ultimate beneficiaries. T-Mobile plans to continue to bring fresh ideas and much-needed competition to the wireless sector, but faces significant challenges, including its lack of low-band spectrum, which not only increases the cost of network deployment, but also increases our dependence on negotiating commercially reasonable rates for roaming. While we will certainly continue to fight hard in the marketplace and compete aggressively for business with the asset base we have, our lack of low-band spectrum makes it difficult and much more expensive for us to provide the network coverage and capacity necessary to meet exploding consumer demand and really change the game for consumers in a lasting way.

Competition in the wireless market is threatened by the dominance of the two largest wireless providers, and absent an appreciation of these challenges and vigilance from Congress and regulators, the disparities in low-band spectrum, scale and financial resources will inevitably lead to higher prices, lower levels of innovation, and slower economic growth. Congress and the FCC have a tremendous opportunity to promote a more competitive marketplace which would provide significant benefits for the U.S.

economy. We all want this industry to be competitively vibrant and a strong driver of economic growth—and decisions we make now will determine whether that shared vision becomes a reality.<sup>25</sup>

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<sup>25</sup> In 2012, the White House Council of Economic Advisors noted that “the wireless industry is an important source of investment and employment in the U.S. economy.” *See* “The Economic Benefits of New Spectrum for Wireless Broadband,” Executive Office of the President, Council of Economic Advisors (Feb. 2012), at 16, *available at* [http://www.whitehouse.gov/sites/default/files/cea\\_spectrum\\_report\\_2-21-2012.pdf](http://www.whitehouse.gov/sites/default/files/cea_spectrum_report_2-21-2012.pdf) (last accessed Feb. 16, 2014).