



Via Electronic Delivery

April 20, 2011

The Honorable Julius Genachowski
Chairman
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Mobile Wireless Competition
WT Docket No. 10-133

Dear Chairman Genachowski:

Mobile Future writes this letter to update the record developed for the Federal Communications Commission's Fifteenth Annual Report on the State of Competition in Mobile Wireless ("Report"), and to highlight the tremendously vibrant nature of the mobile wireless ecosystem. Recently, you noted that mobile broadband "is being adopted faster than any computing platform in history" and "offers a powerful new platform for commerce."¹ You also highlighted recent developments underscoring the dynamism of today's wireless ecosystem, including the deployment of fourth-generation ("4G") services, the surge in mobile app downloads and location-based services, and the remarkable ascendancy of the tablet computer market.²

These statements accurately reflect the dynamic conditions in today's wireless marketplace. As highlighted below, the U.S. wireless market, and the U.S. wireless ecosystem in general, remains the most fiercely competitive, healthy, and perpetually innovative wireless market in the world. Moreover, recent activity since the comment period for the Report closed in August 2010 indicates that consumer demand for mobile broadband services is continuing to drive competition at all levels of the wireless ecosystem, resulting in a wealth of choices in service offerings, devices, and applications.

¹ Julius Genachowski, Chairman, FCC, *Prepared Remarks at the Mobile Future Forum*, Washington, D.C., 4-5 (Mar. 16, 2011) ("*Mobile Future Remarks*").

² *Id.*

Demand for Mobile Broadband

Consumer demand for mobile broadband services continues to explode – as you have recognized, mobile broadband may be the most quickly adopted technology in history.³ As of December 2010, there were 119 million unique 3G and 4G subscribers in the U.S. and smartphone data traffic had reached 58.5 billion MB.⁴ On average, mobile users are now consuming 350 MB per month, a year-over-year traffic increase of 132%.⁵

There appears to be no end in sight to this mobile data explosion. Some analysts expect that, by 2014, mobile broadband traffic will increase 35-fold over 2009 levels; Cisco estimates a 60 times increase over the same period.⁶ Smartphone data is expected to increase to 1.952 trillion MBs by 2015.⁷ In addition, the market for machine-to-machine (“M2M”) communications is expected to increase dramatically the demand for mobile broadband.⁸ One report predicts that the U.S. will become the world leader in individual mobile data consumption by the end of 2011.⁹

Notwithstanding the increasing demand for mobile broadband services, the price for such services continues to decline. For example, the effective cost per megabyte declined approximately 89% from the third quarter of 2008 to the fourth quarter of 2010 (from 47 cents to 5 cents per megabyte).¹⁰ As a result, consumers now pay roughly the same for a

³ See, e.g., *id.* at 5; see also Morgan Stanley, *The Mobile Internet Report* 83 (Dec. 15, 2009), http://www.morganstanley.com/institutional/techresearch/pdfs/mobile_internet_report.pdf (reporting that the rate of mobile Internet adoption has outpaced the rate of desktop Internet adoption, and is continuing to accelerate).

⁴ See *Ex Parte* filing by CTIA-The Wireless Association®, WC Docket No. 07-245, Attachment at Slide 7 (filed Mar. 10, 2011) (“*CTIA Ex Parte*”); Christopher Guttman-McCabe, *Global Spectrum Conspiracy...Really!?!*, CTIA Blog (Feb. 3, 2011), <http://blog.ctia.org/2011/02/03/global-spectrum-conspiracy-really/> (“*CTIA Blog*”).

⁵ See Chetan Sharma, *U.S. Mobile Data Market Update Q4 2010 and 2010*, Always On Real-Time Access (Feb. 28, 2011), <http://www.chetansharma.com/blog/2011/02/28/us-mobile-data-market-update-q4-2010-and-2010/> (“*Chetan Sharma Report*”).

⁶ See *Mobile Future Remarks* at 8; Julius Genachowski, Chairman, FCC, *Prepared Remarks at the Minority Media & Telecom Council Broadband and Soc. Justice Summit*, Washington, D.C., 3 (Jan. 20, 2011).

⁷ See *CTIA Blog*.

⁸ See, e.g., Steve Hilton, *Imagine an M2M world with 2.1 billion connected things*, Analysys Mason (Jan. 27, 2011), http://www.analysismason.com/About-Us/News/Insight/M2M_forecast_Jan2011/ (forecasting that “the number of M2M device connections will grow from 62 million in 2010 to 2.1 billion devices in 2020, at a 36% year-on-year growth rate”).

⁹ *Chetan Sharma Report*.

¹⁰ See Roger Entner, *What is the Price of a Megabyte of Wireless Data?*, Fierce Wireless (Apr. 13, 2011), <http://www.fiercewireless.com/story/entner-what-price-megabyte-wireless-data/2011-04-13>.

megabyte of data as they do for a minute of voice time, and data prices are expected to continue dropping.¹¹

Moreover, today's deployments of new 4G networks increase the likelihood that mobile broadband will be viewed by consumers as a viable competitive alternative for fixed broadband. As 4G network deployments expand, the long-separate markets for fixed and mobile broadband will begin to converge due to increasingly comparable throughput speeds. Today, more than two-thirds (68%) of Americans have broadband download speeds of less than 6 Mbps.¹² Soon, next-generation Long Term Evolution ("LTE") networks will bring new broadband competition with download speeds ranging from 6 Mbps up to a theoretical 100 Mbps. The faster mobile throughput will increase further the competition for broadband services, and some analysts have predicted that within three years, more people will access the Internet via mobile devices than through desktops.¹³

Mobile Network Investment and Deployment

Wireless providers, driven by competition and skyrocketing consumer demand, continue to invest in and deploy next-generation networks that provide even faster and more robust data transfer speeds for accessing the Internet. As wireless players attempt to meet this growing demand, they are engaging in innovative market transactions to maximize spectrum, share infrastructure and create new mobile avenues for content distribution. For example, during the past eight months since the comment period for the Report closed:

- Clearwire, which has both a retail business and wholesale relationships with Sprint, Comcast, and Time Warner Cable, has aggressively built out its 4G WiMAX network. That network now covers 68 markets across the U.S. and provides average download speeds of 3-6 Mbps with burst rates of up to 10 Mbps.¹⁴
- AT&T announced plans to acquire T-Mobile to merge the two companies' spectrum resources and expand mobile broadband deployment to reach 95% of American consumers.¹⁵

¹¹ *Id.*

¹² Internet Access Services: Status as of June 30, 2010, Federal Communications Commission, 2 (Mar. 2011), http://www.fcc.gov/Daily_Releases/Daily_Business/2011/db0321/DOC-305296A1.pdf.

¹³ See, e.g., Mary Meeker, *Internet Trends*, Morgan Stanley (Apr. 12, 2010), http://www.morganstanley.com/institutional/techresearch/pdfs/Internet_Trends_041210.pdf.

¹⁴ Press Release, Clearwire, *CLEAR 4G Breezes Into South Florida On Cyber Monday* (Nov. 29, 2010), <http://corporate.clearwire.com/releases.cfm?Year=2010>.

¹⁵ Press Release, AT&T, *AT&T to Acquire T-Mobile USA from Deutsche Telekom* (Mar. 20, 2011), <http://www.att.com/gen/press-room?pid=19358&cdvn=news&newsarticleid=31703&mapcode=corporate|financial>.

- MetroPCS became the first mobile carrier to launch a 4G LTE service with deployments in six metropolitan areas and plans to expand service to at least eight other cities in the upcoming year. MetroPCS LTE users are expected to experience download speeds of 6-8 mbps.¹⁶
- Verizon Wireless launched its LTE service with download speeds of 5-12 Mbps and 2-5 Mbps upload speeds to more than 100 million potential customers in 38 markets, and announced plans to cover nearly all of its legacy network with LTE by 2013.¹⁷
- AT&T has aggressively upgraded 80 percent of its network to HSPA+.¹⁸ In addition, AT&T plans to roll out its LTE network to 70-75 million pops by the end of 2011.¹⁹
- T-Mobile completed an upgrade of its 3G network to HSPA+ in 75 metropolitan markets, providing users with “typical download speeds that are on par with or faster than competing 4G technologies.”²⁰
- LightSquared, a new wholesale wireless provider, made significant progress on its commitment to provide 4G coverage to at least 100 million people in the U.S. by December 31, 2012; 145 million people by December 31, 2013; and 260 million people by December 31, 2015,²¹ announcing that it had received hundreds of millions of dollars in financing to support network construction.²² In addition,

¹⁶ Press Release, MetroPCS, *MetroPCS Launches 4G LTE Network in San Francisco Metropolitan Area*, (Dec. 1, 2010), <http://www.metropcs.com/presscenter/articles/mpcs-news-20101201.aspx>; Assoc. Press, *MetroPCS Launches First Faster Data-Access Network*, *localtechwire.com* (Sept. 22, 2010), http://localtechwire.com/business/local_tech_wire/news/blogpost/8324045/.

¹⁷ Press Release, Verizon Wireless, *Blazingly Fast: Verizon Wireless Launches The World’s Largest 4G LTE Wireless Network On Sunday, Dec. 5* (Dec. 4, 2010), <http://news.vzw.com/news/2010/12/pr2010-12-03.html>; Dan Meyer, *Verizon Wireless set to alter Mobile Landscape with LTE Launch*, *RCR Wireless* (Nov. 23, 2010), <http://www.rcrwireless.com/ARTICLE/20101123/CARRIERS/101129986/verizon-wireless-set-to-alter-mobile-landscape-with-lte-launch>.

¹⁸ See Karl Bode, *AT&T Says 80% Of Network Now HSPA+*, *DSLReports.com* (Nov. 17, 2010), <http://www.dslreports.com/shownews/ATT-Says-80-Of-Network-Now-HSPA-111417>.

¹⁹ Dan Meyer, *@ 4G World: MetroPCS expands LTE to Detroit*, *RCR Wireless* (Oct. 20, 2010), <http://www.rcrwireless.com/ARTICLE/20101020/CARRIERS/101029993/-4g-world-metropcs-expands-lte-to-detroit>.

²⁰ Press Release, T-Mobile, *T-Mobile 4G Service Now Available in More Markets and on New Devices* (Nov. 2, 2010), <http://press.t-mobile.com/articles/americas-largest-4g-network>.

²¹ *SkyTerra Communications, Inc., Transferor and Harbinger Capital Partners Funds, Transferee Applications for Consent to Transfer of Control of SkyTerra Subsidiary, LLC*, Memorandum Opinion and Order and Declaratory Ruling, 25 FCC Rcd 3059 (2010).

²² Press Release, LightSquared, *LightSquared Announces Additional Financing* (Feb. 22, 2011), <http://www.lightsquared.com/press-room/press-releases/lightsquared-announces-additional-financing/>.

LightSquared announced in March 2011 that Leap Wireless had become its first telecommunications provider customer.²³ News outlets have also widely reported plans for LightSquared to use some of Sprint's network infrastructure to roll-out the company's service. The rumored infrastructure deal would speed LightSquared's deployment to build yet another nationwide wireless network.²⁴

Mobile Broadband Devices

The mobile device market continues to flourish, and consumers can now choose from more than 630 devices supplied by at least 32 manufacturers.²⁵ In the fourth quarter of 2010, 48% of mobile devices sold in the U.S. were smartphones, underscoring further consumers' desire for the most cutting-edge mobile broadband services.²⁶ For the first time in U.S. history, smartphone shipments exceeded combined desktop and laptop computer shipments.²⁷ Finally, the tablet market took off in 2010 with the introduction of the iPad, and many competing tablets have followed. Hundreds of tablets debuted at the 2011 International Consumer Electronics Show,²⁸ highlighting the fierce competition occurring in that market segment.

Mobile Device Operating Systems

One particularly dynamic segment of the mobile wireless ecosystem is the operating system market. More than six operating systems are now available for mobile devices, including Android OS, iOS, Blackberry OS, Windows Phone 7, Palm/WebOS, Symbian, and others.²⁹ According to one report, the battle for top market share in the U.S. smartphone operating system market is "tighter than it has ever been."³⁰

²³ Peter Svensson, *LightSquared Gets First Deal With a Phone Company*, ABC News (Mar. 22, 2011), <http://abcnews.go.com/Technology/wireStory?id=13193758>.

²⁴ See, e.g., Karl Bode, *Credit Suisse: Sprint/Lightsquared Deal to be Announced Soon; Lightsquared Will Lease Access to 45,000 Sprint Base Stations*, DSLReports.com (Apr. 7, 2011), <http://www.dslreports.com/shownews/Credit-Suisse-SprintLightsquared-Deal-to-be-Announced-Soon-113587>.

²⁵ See, e.g., Reply Comments of Mobile Future, GN Docket No. 09-191, 2 (Nov. 4, 2010); *Ex Parte* filing by CTIA, WT Docket No. 10-133, Attachment (Dec. 2, 2010).

²⁶ See Chetan Sharma Report.

²⁷ *Id.*; see also *Mobile Future Remarks* at 5 (stating that smartphone and tablet sales now exceeds PC sales).

²⁸ Chetan Sharma Report.

²⁹ See *Who is Winning the U.S. Smartphone Battle?*, nielsenwire (Mar. 3, 2011), http://blog.nielsen.com/nielsenwire/online_mobile/who-is-winning-the-u-s-smartphone-battle/.

³⁰ See *id.*; see also *Apple Leads Smartphone Race, while Android Attracts Most Recent Customers*, nielsenwire (Jan. 3, 2011), http://blog.nielsen.com/nielsenwire/online_mobile/apple-leads-smartphone-race-while-android-attracts-most-recent-customers/.

Mobile Apps Market

The growth of the mobile “apps” market is also astounding. In just three years, subscribers have downloaded more than 13 billion applications to their mobile devices.³¹ Today, consumers have access to almost 1 million apps from 26 different app stores.³² In addition, the content available via mobile apps continues to grow. For example, Time Warner Cable and Cablevision have both released applications to allow customers to stream programming live on their iPads. The “apps economy” is now projected to generate \$38 billion in sales in 2015.³³

These powerful statistics demonstrate that competition and innovation are thriving in all segments of the wireless ecosystem, providing significant consumer welfare benefits and countless high-paying jobs. It is this type of market dynamism that will fuel U.S. global competitiveness and help to secure our economic future. I urge the Commission to keep these encouraging facts in mind as it completes its work in this very important proceeding.

Pursuant to Section 1.1206(b) of the Commission’s rules, I am filing this letter in the above-referenced docket. Please feel free to contact me with any questions.

Sincerely,

Jonathan Spalter, Chairman
Mobile Future
1325 Pennsylvania Avenue, N.W.
Suite 600
Washington, DC 20004
www.mobilefuture.org

cc: Commissioner Michael Copps
Commissioner Robert McDowell
Commissioner Mignon Clyburn
Commissioner Meredith Baker
Ms. Marlene Dortch, Secretary

³¹ See, e.g., Press Release, Apple, *Apple’s App Store Downloads Top 10 Billion* (Jan. 22, 2011), <http://www.apple.com/pr/library/2011/01/22appstore.html> (stating that seven billion apps were downloaded from Apple’s App Store in the last year alone); Android Market Statistics, AndroLib (Mar. 18, 2011), <http://www.androlib.com/appstats.aspx> (providing an estimate of more than 3.7 billion app downloads to date from the Android market).

³² *Id.*

³³ *Mobile Future Remarks* at 4-5.