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

In the Matter of)
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

REPLY COMMENTS OF CONSUMER FEDERATION OF AMERICA, CONSUMERS UNION, FREE PRESS, MEDIA ACCESS PROJECT, NEW AMERICA FOUNDATION, AND PUBLIC KNOWLEDGE

Mark Cooper Consumer Federation of America

Joel Kelsey Consumers Union

Ben Scott Chris Riley Free Press

Matthew F. Wood Parul P. Desai Media Access Project

Michael Calabrese Sascha Meinrath New America Foundation

Gigi Sohn Harold Feld Public Knowledge

October 22, 2009

Matthew F. Wood Parul P. Desai Counsel for Consumers Union

Chris Riley Counsel for Free Press

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The Consumer Federation of America, Consumers Union, Free Press, Media Access Project, the New America Foundation, and Public Knowledge (together, the "Public Interest Commenters") respectfully submit this reply to initial comments filed in the above-captioned docket¹ in response to the Commission's *Notice of Inquiry* (the "*Notice*"). The majority of those initial comments confirmed the Public Interest Commenters' conclusion that the mobile wireless ecosystem, including the commercial mobile services market itself and a range of upstream and downstream markets, are not effectively competitive. This failure is due in large part to a variety of barriers to the entry and growth of competitors. Other commenters thus affirmed the need for the Commission to collect granular data from mobile wireless market participants, along the lines of the Public Interest Commendations, in order to assess the effectiveness of competition in a wide range of specific geographic, product, service, and device markets.

¹ In the Matter of 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, *Notice of Inquiry*, FCC 09-67 (rel. Aug. 27, 2009) ("*Mobile Wireless Competition Notice*" or "*Notice*").

INTRODUCTION AND SUMMARY

CTIA joined with AT&T and Verizon Wireless – the two largest wireless carriers – to sing the praises of the marketplace they dominate² in the initial round of comments on the *Notice*. Other providers filing initial comments in this proceeding sang a different tune. Those who provide services in competition with these two largest incumbents uniformly recognized that there are at least some major impediments to effective competition throughout the mobile value chain. CTIA proclaimed in its comments that "the mobile wireless ecosystem is the poster child for competition,"³ but failed to reveal the caption on its much-ballyhooed poster. As made abundantly clear in the comments of providers who do not enjoy the market power of CTIA's largest members, this poster reads "<u>MISSING</u>: Effective Competition in the Mobile Wireless Marketplace. Have you seen me?"

Unfortunately, the answer for American consumers is that they have neither seen nor experienced the full benefits of real competition nearly often enough. As demand for, use of, and reliance on mobility have increased, the marketplace (and the Commission's regulatory approach thereto) obviously has worked to expand service. Nevertheless, most views proffered by CTIA, Verizon Wireless, AT&T, and other nationwide carriers are misguided when it comes to the functioning of this marketplace and the benefits consumers derive from it. The dominant players in the industry argued, at various times, and in somewhat contradictory and internally inconsistent fashion, that the wireless industry is dynamically and fiercely competitive,⁴ or at

² See, e.g., AT&T, Press Release, "Record Wireless Gains, Double-Digit Growth in IP-Based Revenues, Strong Cash Flow Highlight AT&T's Third-Quarter Results," Oct. 22, 2009, at http://www.att.com/gen/press-room?pid=4800&cdvn=news&newsarticleid=27290 (citing the "record-low total subscriber churn" enjoyed by AT&T in the quarter just ended).

³ Comments of CTIA-The Wireless Association, WT Docket No. 09-66, at 3 (filed Sept. 30, 2009) ("CTIA Comments").

⁴ See id. at 1.

least that it is relatively competitive when compared to wireless markets in other nations,⁵ or at bare minimum that it is about as open and competitive as it should be considering the unique economics of the wireless industry,⁶ the "two-sided" nature of the wireless market,⁷ and other such considerations.

Something certainly is two-sided, but it's not just the market. CTIA and the nationwide carriers tell one tale when it comes to the nature of competition in the mobile wireless ecosystem, but other providers, public interest groups, and consumer advocates have shown that there is another side to the story. The question the Commission must answer is whether there are additional steps it can take to ensure that the benefits of innovation flow to the users of mobile wireless services, in the form of improved choices, easier switching between plans and providers, more efficient and economical service (with prices that reflect carriers' actual costs), and increased overall consumer welfare.

The majority of the initial comments submitted in response to the *Notice* demonstrate that there remain significant problems with the structure and performance of a market increasingly controlled by the "big four," or even the "big two" nationwide carriers. The Commission needs newer and better data on provider conduct and consumer behavior to pinpoint flaws that the market cannot resolve on its own. There are specific types of information that the Commission should collect in order to enhance its understanding of these market failures. As the Public Interest Commenters and others respectfully submit, there also are targeted decisions and rules

⁵ See, e.g., *id.* at 8-11.

⁶ Comments of Verizon Wireless, WT Docket No. 09-66 (filed Sept. 30, 2009) ("Verizon Wireless Comments"), Exhibit A, at pp. 10, 32; Comments of T-Mobile USA, Inc. WT Docket No. 09-66, GN Docket Nos. 09-157 & 09-51, at 35 (filed Sept. 30, 2009) ("T-Mobile Comments").

⁷ Comments of AT&T Inc., WT Docket No. 09-66 (filed Sept. 30, 2009) ("AT&T Comments"), Attachment, at p. 33.

that the Commission should adopt in several areas to correct the problems and remove the barriers to competition identified by so many parties to this proceeding.

I. INDUSTRY PARTICIPANTS OTHER THAN THE VERY LARGEST CARRIERS UNIFORMLY RECOGNIZED BARRIERS TO ENTRY AND GROWTH IN THE COMMERCIAL MOBILE SERVICES MARKET AND ADJACENT MARKETS

CTIA and the big four nationwide carriers unleashed an avalanche of paper in the initial round of comments in response to the *Notice*. While another refutation of all the repetitive and spurious arguments put forth in their comments is unnecessary here, it is most interesting to note that not all wireless providers and market participants have been snowed by the dominant carriers' tactics.

The Public Interest Commenters undertake in subsequent sections of these reply comments a very brief analysis of just a few claims made by AT&T, Verizon Wireless, Sprint, T-Mobile, and CTIA regarding market structure, carrier conduct, consumer behavior, and market performance. At the outset, however, the Public Interest Commenters call to the Commission's attention the fact that CTIA and the largest carriers apparently speak for very few wireless providers when it comes to the topic of the barriers to entry and growth that exist up and down the mobile value chain. Looking at the comments filed by several of its members, one might wonder if CTIA simply fell victim to spelling errors when pondering the "virtuous cycle" of innovation in the mobile wireless ecosystem⁸ rather than the vicious circle of consolidation, exclusion, increased market power, decreased consumer benefits, and rising profits for the most

⁸ CTIA Comments at 29-31.

powerful incumbent providers – leading to further acquisitions of former competitors,⁹ more exclusionary tactics, and so on.

Even amongst the "big four" themselves, there are fault lines. For example, Verizon Wireless and AT&T alone agreed that the market for special access services and backhaul is "competitive and growing,"¹⁰ and therefore called for even further *de*regulation of legacy special access services.¹¹ Not surprisingly, nationwide carriers Sprint and T-Mobile – neither of which has the advantage of integration or affiliation with wireline network owners such as Verizon and AT&T – expressed a less optimistic view of competition in the provision of this crucial input. Sprint rightfully complained about "the three RBOCs. . . enjoying monopoly rents on (and obscene profits from) the special access facilities they provide to wireless carriers."¹² T-Mobile called upon the Commission to "improve its oversight of the special access services provided by the incumbent local exchange carriers ('ILECs')," explaining that "current regulation is inadequate to protect special access customers such as independent wireless providers."¹³ T-Mobile opposes the imposition of "burdensome regulatory intervention,"¹⁴ yet seems very much in favor of improved "oversight" necessary to protect competition. Renewed special access

⁹ See, e.g., Comments of Consumer Federation of America, Consumers Union, Free Press, Media Access Project, the New America Foundation, and Public Knowledge, WT Docket No. 09-66, at 8 n.17 (filed Sept. 30, 2009) ("Public Interest NOI Comments") (discussing spate of "big four" carrier acquisitions and strategic partnerships discussed in the Commission's *Thirteenth Report* on CMRS competition, Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services, WT Docket No. 08-27, *Thirteenth Report*, DA 09-54, ¶ 30 (rel. WTB Jan. 16, 2009) ("*Thirteenth Report*")).

¹⁰ See, e.g., Verizon Wireless Comments at 95.

¹¹ See, e.g., AT&T Comments at 75-76.

¹² Comments of Sprint Nextel Corporation, WT Docket No. 09-66, at 13 (filed Sept. 30, 2009) ("Sprint Comments").

¹³ T-Mobile Comments at 5.

¹⁴ *Id.* at 35.

oversight would promote competition for carriers large and small. "The market power incumbent LECs possess over their bottleneck facilities has its most pernicious effect on the deployment of broadband services,"¹⁵ and exercise of that market power generally prevents independent wireless providers from competing fairly with Verizon Wireless and AT&T.¹⁶

The positions of the nationwide carriers and CTIA generally converged when these dominant players discussed the nature of competition in other upstream, downstream, and adjacent markets. Nevertheless, carriers other than the "big two," including T-Mobile again and a host of smaller mobile service providers, consistently noted in their comments the presence of additional barriers to the entry and growth of would-be competitors. T-Mobile was the only one of the nationwide facilities-based carriers that called for changes to the Commission's roaming rules, with this smallest of the national providers favoring "targeted measures to resolve market

¹⁵ Sprint Comments at 14; *see also* Public Interest NOI Comments at 5, 27-28 (calling for Commission collection of data on special access prices, terms, and conditions, and noting that special access barriers "impact especially (though not exclusively, by any means) mobile Internet access providers, owing to the excessive backhaul rates imposed on Internet traffic").

¹⁶ Other commenters calling attention to special access bottlenecks that act as barriers to entry and growth include Clearwire, MetroPCS, and US Cellular. See Comments of Clearwire Corporation, WT Docket No. 09-66, at 8 (filed Sept. 30, 2009) ("Clearwire Comments") ("[T]he lack of access to backhaul is a central barrier to competitive entry and innovation outside of those few markets where special access rates are subject to competition. . . . [L]ack of affordable backhaul access may limit the ability even of well-funded providers like Clearwire to enter markets"); Comments of MetroPCS Communications, Inc., WT Docket No. 09-66, at iii (filed Sept. 30, 2009) ("MetroPCS Comments") ("[W]hile much of the success of the mobile wireless services industry has resulted from the Commission's light regulatory touch, a firmer hand is required when there are market failures which threaten the future competitiveness of the mobile wireless services market."); id. at 48 ("It is notable that the three largest incumbent LECs dominate the special access market, making market conditions ripe for an unfair chilling of competition."); Comments of United States Cellular Corporation, WT Docket No. 09-66, GN Docket Nos. 09-157 & 09-51, at 2 (filed Sept. 30, 2009) ("US Cellular Comments") ("By fixing [special access regulations] and re-setting special access rates, the FCC would decrease a significant barrier to entry and growth of wireless carriers, spur investment in wireless carriers' networks, expand rural wireless services, and strengthen competition.").

problems with certain other key inputs for wireless services.³¹⁷ Thus, T-Mobile called for elimination of the home market exclusion to the Commission's automatic roaming rules along with the extension of automatic roaming requirements to data,¹⁸ acknowledging that "absent Commission oversight, roaming will not be provided at reasonable rates, terms, and conditions, or may be withheld altogether, diminishing competition at the retail level and harming consumers.³¹⁹ Other commenters, including Bright House,²⁰ Cellular South,²¹ Cincinnati Bell Wireless,²² Cricket,²³ MetroPCS,²⁴ NTCA,²⁵ and Ntelos²⁶ likewise called upon the Commission

¹⁷ T-Mobile Comments at 4.

¹⁸ See id.; see also Public Interest NOI Comments at 29-30.

¹⁹ T-Mobile Comments at 4-5; *see also id.* at 24-25 ("Without reasonable roaming relationships among providers, both competition and innovation in mobile services will be limited. . . . [T]he home market exclusion severely limits host carriers' obligations to provide automatic roaming on a 'reasonable and nondiscriminatory' basis.").

²⁰ See Comments of Bright House Networks, WT Docket No. 09-66, at 5-6, 11-15 (filed Sept. 30, 2009) ("Bright House Comments"); *id.* at 11 ("In order to remove barriers to entry in the wireless market, the Commission must create a regulatory regime under which new entrants can obtain roaming agreements for all services they may offer that facilitate the provision of wide-area and nationwide service.").

²¹ See Comments of Cellular South, Inc., WT Docket No. 09-66, at 18 (filed Sept. 30, 2009) ("Cellular South Comments") ("Cellular South encourages the Commission to examine in the *Mobile Wireless Competition Report* the extent to which the absence of mobile data roaming agreements is adversely affecting the competitiveness of the mobile wireless marketplace.").

²² See Comments of Cincinnati Bell Wireless LLC, WT Docket No. 09-66, at 2-7 (filed Sept. 30, 2009) ("Cincinnati Bell Comments").

²³ See Comments of Cricket Communications, Inc., WT Docket No. 09-66, at 2 (filed Sept. 30, 2009) ("Cricket Comments") ("[T]he Commission has exposed consumers to harm from the nation's largest carriers that have amassed a dominant position in many geographic areas of the country and have abused that market position to extract anticompetitive prices for wholesale services such as roaming.").

²⁴ See MetroPCS Comments at 24-35; see also id. at 25 ("[T]he Commission has explicitly recognized the fundamental fact that that wireless carriers must provide their customers with nationwide service in order to compete effectively in today's CMRS marketplace.").

²⁵ See Comments of the National Telecommunications Cooperative Association, WT Docket No. 09-66, at 3 (filed Sept. 30, 2009) ("NTCA Comments") ("Wireless broadband deployment is

to remedy impediments to competition by replacing current roaming rules with regulations that ensure non-discriminatory access to this key input.²⁷

Many of the same commenters highlighted the detrimental effects of other exclusionary practices, such as the widespread resort to handset exclusivity arrangements by dominant carriers. While carriers with market power and growing market share confidently assured the Commission that exclusivity is good for mobile wireless consumers and competition,²⁸ providers locked out of access to the most popular handsets and devices did not share this enthusiasm for such arrangements.²⁹ Providers that struggle even to secure access to any smartphone that will

predicated on the availability of a network similar to the one available for voice. Automatic data roaming must be required.").

²⁶ See Ntelos Comments, WT Docket No. 09-66, at 6-7 (filed Sept. 30, 2009) ("Ntelos Comments").

²⁷ See Comments of Rural Cellular Association, WT Docket No. 09-66, at 12 (filed Sept. 30, 2009) ("RCA Comments") ("[R]oaming practices of the big 4 carriers undercut any conclusion that the mobile wireless marketplace enjoys vibrant competition."); *id.* at 13 ("[G]iven the fact that the mobile wireless marketplace is unable to sufficiently protect consumer welfare by generating reasonable automatic data roaming agreements among competing carriers, the Commission should step in to require such agreements."); *see also* Comments of the Rural Telecommunications Group, Inc., WT Docket No. 09-66, at 4-5 (filed Sept. 30, 2009) ("RTG Comments"); US Cellular Comments at 14-17.

²⁸ See AT&T Comments, Attachment, at 14, 26-28, 37. AT&T's expert argues that exclusivity sharpens incentives to engage in pro-consumer activities, and that in the absence of exclusive deals a carrier may decline to invest or compete vigorously due to insufficient anticipated sales volumes and other effects. *See id.* at 14. AT&T has argued to the contrary elsewhere, declaring that "[a]lthough exclusive contracts theoretically might benefit consumers under some different set of circumstances, under current video marketplace conditions any such benefits are more than outweighed by the negative effect that exclusive agreements have on competition and consumer choice." Comments of AT&T Inc., MB Docket No. 07-51, at 13-14 (filed July 2, 2007). One wonders if the circumstances to which AT&T alludes really are the level of competition claimed for a particular marketplace rather than AT&T's status as either an incumbent or new entrant.

²⁹ See Cellular South Comments at 15-17; Cincinnati Bell Comments at 3; NTCA Comments at 4-5; Ntelos Comments at 4-6; RCA Comments at 6-9; RTG Comments at 6-7; US Cellular Comments at 2; *see also* Public Interest NOI Comments at 27.

operate on their assigned spectrum bands³⁰ provided ample reason in their initial comments for the Commission to collect additional data and conduct further analysis on the harms caused by such exclusivity arrangements.

In light of the foregoing, it is clear that CTIA and the largest incumbent wireless carriers do not speak for all mobile industry participants when it comes to evaluating barriers to competitive entry and growth. Whether describing the problems detailed above, or equally pervasive problems stemming from increased consolidation³¹ and a related decrease in access to spectrum inputs³² in a more and more concentrated industry, the majority of commenters responding to the Notice agreed that there are at least some significant impediments to competition in the mobile value chain. The Commission should gather new information on the power of the largest providers to erect and maintain barriers in their competitors' paths, and then

³⁰ See US Cellular Comments at 2 ("Through exclusive arrangements for 'smart phones,' the national carriers have prevented customer access to advanced wireless applications in rural parts of the country, decreased competition for wireless services in all areas, and created a barrier to the growth of broadband services."); Cellular South Comments at 8-9 ("The rural and regional carriers that obtained Lower A Block licenses in the 700 MHz auction are facing artificial technical obstacles that threaten to affect the carriers' plans to deploy broadband infrastructure using Lower A Block spectrum" because "equipment manufacturers are not likely to develop and produce equipment for the Lower A Block spectrum" due to the demands of Verizon Wireless and AT&T.).

³¹ See, e.g., Cincinnati Bell Comments at 3-4 (noting that AT&T and Verizon Wireless acquisitions eliminated the incentive for these two carriers to enter into reasonable roaming agreements after they had filled out their nationwide footprints and no longer depended on other providers for roaming); Ntelos Comments at 6 ("[R]ecent acquisitions [have] change[d] the wireless market from one in which a number of mid-tier regional and rural carriers were vying to become major competitors – thereby assuring consumers of many competitive choices in a healthy marketplace – to one in which a very few gigantic entities enjoy unquestioned dominion"); NTCA Comments at 2 ("Consolidation ... and the lack of regulatory response to anticompetitive conditions is making it more difficult for small providers to offer a competitive service and [] jeopardizing the availability of wireless service in many rural communities. ... [M]ergers and acquisitions in the CMRS market have created a dangerous duopoly."); Bright House Comments at 9; Cricket Comments at 2.

³² See, e.g., Cellular South Comments at 7; MetroPCS Comments at 5-14.

act expeditiously to eliminate the harmful bottlenecks, practices, and effects identified by the Public Interest Commenters and other participants in this proceeding.

II. THE COMMISSION SHOULD COLLECT NEW DATA FROM INDUSTRY PARTICIPANTS THEMSELVES TO ASSESS COMPETITION IN THE MOBILE WIRELESS MARKET AND ADJACENT MARKETS

The *Notice* sought comment on possible new analytic frameworks and new "sources of data, especially quantitative data, [that] can be used to perform a comprehensive competition analysis of the mobile wireless market."³³ CTIA, along with the largest and most dominant incumbent wireless carriers, invited the Commission to continue relying on the same framework³⁴ and the same "traditional information sources"³⁵ used to compile the Commission's past reports. This fondness for tradition is understandable coming from these quarters, as the use of incomplete, inaccurate, unverified, and potentially biased data sources traditionally has allowed these carriers to grow larger and gain more market power.³⁶

Other parties agreed with the Public Interest Commenters, however, in calling for new and better data collection by the Commission itself. As RTG explained, wireless coverage data from third party contractors "upon which the Commission relies heavily to draw its conclusions, is typically culled from the overly optimistic (and rarely confirmed) coverage representations used in marketing materials generated by the mobile operators themselves."³⁷ Rather than relying on marketing materials, the Commission should require carriers to submit market coverage data, buildout timetables, and other granular data necessary to assess service quality and affordability. As the New Jersey Division of Rate Counsel made clear, the Commission should analyze rates, terms, and conditions of wireless offerings in "particular geographic or

³³ *Notice* ¶¶ 8-11.

³⁴ See Verizon Wireless Comments at 2, 7-12; AT&T Comments at 75; CTIA Comments at 71-75.

³⁵ See CTIA Comments at 80.

³⁶ See Public Interest NOI Comments at 33-35.

³⁷ RTG Comments at 3.

product markets" to determine whether providers "are able to profitably sustain price increases [because] such pricing behavior could be evidence of market dominance."³⁸

The Public Interest Commenters agree with the New Jersey Division of Rate Counsel the Commission should indeed collect "more granular data" in order to "provide a public national clearinghouse of the rates, terms, and conditions of wireless offerings" and "to conduct analyses that permit proper product market definitions (as between, for example, PDAs and Blackberries and the more 'traditional' voice wireless markets)."³⁹ Because "[i]nformation is essential to an efficient market,"⁴⁰ the Commission should not rely on overly broad generalizations, nor solely on national or super-regional averages, to assess the level of competition in specific geographic, product, service, and device markets.

Speaking of overly broad generalizations and averages, Sprint presented a small assortment of statistics in comments designed to discredit the Public Interest Commenters' earlier submissions in this docket.⁴¹ For a number of reasons, Sprint's efforts were unavailing, and its own evidence – to the extent that advertising constitutes evidence⁴² – was unconvincing. As the Public Interest Commenters explained in comments responding to the *Notice*, overreliance on figures such as carrier revenue per minute ("RPM") and average revenue per user

³⁸ Comments of the New Jersey Division of Rate Counsel, WT Docket No. 09-66, at 4 (filed Sept. 30, 2009) ("NJ Rate Counsel Comments").

³⁹ *Id.* at 4-5; *see also* Public Interest NOI Comments at 4-5.

⁴⁰ NJ Rate Counsel Comments at 5; *see also* Public Interest NOI Comments at 37; Comments of Consumer Federation of America, Consumers Union, Free Press, Media Access Project, the New America Foundation, and Public Knowledge, CG Docket No. 09-158, CC Docket No. 98-170, WC Docket No. 04-36, at 30-31 (filed Oct. 13, 2009).

⁴¹ See Sprint Comments at 2-8.

⁴² See *id.* at 7 ("Earlier this month, Sprint introduced an 'Any Mobile, AnytimeSM, plan that enables customers to get unlimited mobile-to-mobile calls from the Sprint network to any other domestic wireless phone at any time.").

("ARPU") does not allow for proper analysis of competition and efficiency. The Commission needs to enhance its understanding of the context for such figures by collecting data on the prices charged, costs incurred, and profits realized by the carrier.⁴³ In an effectively competitive market, consumers should expect to see matching rates of decline in consumer prices and carrier costs.⁴⁴ Based on publicly available information, the Public Interest Commenters submitted data suggesting that carrier costs have fallen – while profits have skyrocketed – because capital expenditures are declining as a percentage of revenue,⁴⁵ and because parallel conduct allows for maintenance of higher prices than a competitive market would bear.⁴⁶ The Commission can and should collect relevant data from carriers in order to evaluate further the economics of specific geographic and product markets.

The unacceptable alternative would be continued reliance on national averages and estimates to assess the level of competition and consumer benefits for diverse markets and users. Sprint's RPM figures do not account for the fact that customers are encouraged to purchase service packages with more minutes than the customer needs or uses.⁴⁷ Nor do they account for punitive charges assessed to customers who pay as they go, or who exceed their allotted voice, message, and data caps, thereby incurring astronomical bills that escalate out of all proportion to the carrier's marginal costs for providing such additional capacity.⁴⁸ Carriers therefore benefit from the reality that consumers who use too few minutes (or messages or megabytes) overpay, as do consumers who use too many. Furthermore, Sprint's figures on the "average price of a

⁴³ See Public Interest NOI Comments at 35-36, 38-39.

⁴⁴ *See id.* at 22.

⁴⁵ See id., Appendix.

⁴⁶ *See id.* at 11.

⁴⁷ *See id.* at 10-12.

⁴⁸ See id. at 11, 19-20.

mobile call . . . for American consumers^{"49} conveniently ignore the fact noted by the Commission in the *Thirteenth Report* that "declining voice ARPU (due to various factors . . .) continues to be offset by growth in data ARPU."⁵⁰

III. THE PUBLIC INTEREST COMMENTERS RESPONDED TO THE *NOTICE*'S CALL FOR NEW IDEAS, BUT DOMINANT CARRIERS REPEATED OLD ARGUMENTS WHILE OFFERING UNSATIFACTORY AND CONTRA-DICTORY ASSESSMENTS OF PRESENT MARKET DYNAMICS

The largest incumbent providers and CTIA declined the *Notice*'s invitation to promote the use of newer and more accurate information sources and analytical frameworks, preferring instead to repeat the mistakes of the past in relying on incomplete and unverified data. In much the same way, these commenters – who find the current level of ineffective competition much to their liking, and benefit from high barriers to entry and growth of competitors as well as high switching costs for consumers – typically repeated their generic arguments submitted in earlier comments in this docket. Despite the practiced nature of their submissions made in response to the *Notice*, however, there remain in the dominant carriers' stories several self-contradictions about the market's structure and performance, as well as curious counter-factual conclusions about carrier conduct and the attendant consumer benefits therefrom.

For instance, on the topic of concentration and consolidation in the wireless marketplace, CTIA and the largest carriers are all over the map – not just literally speaking, when it comes to the vast new service territories they have added to their already large footprints by swallowing up former competitors, but rhetorically as well. CTIA commenced its discussion of current wireless market structure by arguing that the United States wireless industry is relatively

⁴⁹ Sprint Comments at 5 (emphasis added).

⁵⁰ *Thirteenth Report* ¶ 195.

unconcentrated when compared to other national industries.⁵¹ In CTIA's initial framing of the issue then, the U.S. market is pronounced "most competitive" based on nothing more than indicia of concentration such as Herfindahl-Hirschman Index ("HHI") measurements.⁵² Later in the same comments, however, CTIA suggests that "HHI is but one of many factors the Commission should consider in the market structure component of its 'effective competition' review."⁵³

The Public Interest Commenters are in full agreement with CTIA's latter sentiment: HHI, along with other simplistic methods for simply counting up the number of competitors potentially offering service in a particular marketplace,⁵⁴ are not enough to determine the level of competition in a market. As explained in the Public Interest Commenters' initial submission in response to the *Notice*, the Commission should do more to collect data on and assess competition in particular geographic, product, service, and device markets, and should move to classify and analyze text messaging and various mobile data services markets as separate and distinct from mobile voice and from each other.⁵⁵

Moreover, simply counting the number of potential competitors in a particular area does not tell the Commission anything about the market power, conduct, or motivations of carriers that are functioning in a less than perfectly competitive marketplace. When competition is

⁵¹ See CTIA Comments at 8-9.

⁵² *Id.*; *see also id.*, Attachment A, at 2 (arguing that "the HHI calculation for the U.S. wireless market is the lowest among" surveyed countries, thereby proving "clearly [that] the U.S. market is competitive").

⁵³ *Id.* at 78; *see also* Verizon Wireless Comments at 13-14; AT&T Comments at 23-34; T-Mobile Comments at 6.

⁵⁴ *See id*. at 6.

⁵⁵ See Public Interest NOI Comments at 9-10, 36-37; see Comments of Public Knowledge, WT Docket Nos. 09-66 & 08-7, at 2 (filed Sept. 30, 2009) ("Text messages are a technologically distinct service, priced as a separate service for consumers."); MetroPCS Comments at 35-37.

insufficiently robust and service plan disclosure requirements are not stringent enough, carriers have the ability and the incentive to shroud the true cost to consumers and service plan limitations for the providers' various bundled offerings.⁵⁶

Nevertheless, it is CTIA and the nationwide carriers themselves that rely too heavily on relative HHI levels and market share data to claim, repeatedly, that this information "overwhelmingly" demonstrates that the U.S. wireless industry is highly competitive.⁵⁷ Their claim ignores the fact that the U.S. wireless market is highly concentrated according to standard antitrust guidelines,⁵⁸ as well as the carriers' own admonishment to look beyond concentration and market share to assess market structure and performance. Finally, the claim of tremendous competition in the mobile wireless market is somewhat hollow, to say the least, in light of the fact that the big four nationwide carriers served 85% of the market at the end of 2008.⁵⁹ That number should continue to rise, for at least two reasons: (1) the new subscribers acquired in these carriers' most recent acquisitions; and (2) their increasing market shares, driven largely by a disproportionate number of subscriber additions in the market for smartphones and broadband-enabled devices – a market that is thoroughly dominated by large incumbent carriers with exclusive handset arrangements.⁶⁰ That number will continue to rise as well if the largest

⁵⁶ See Public Interest NOI Comments at 9, 37-38 (citing Xavier Gabaix and David Laibson, *Shrouded Attributes and Information Suppression in Competitive Markets* (May 22, 2004)).

⁵⁷ See, e.g., CTIA Comments at 10.

⁵⁸ See Cricket Comments at 5-6.

⁵⁹ CTIA Comments at 9.

⁶⁰ See Cellular South Comments at 2 ("AT&T and Verizon Wireless together accounted for approximately 86 percent of the net customer additions by the largest U.S. carriers in the second quarter of 2009."). Cellular South also details the exercise of market power by AT&T and Verizon Wireless as shown by these carriers' ability to extend their dominance into the handset manufacturing market when ordering devices for their 700 MHz spectrum assignments. *See id.* at 4-15.

carriers continue "improving" efficiency and expanding their nationwide footprints via mergers and acquisitions – though the big four carriers and CTIA likely will continue to cite the number of major competitive providers in various markets no matter how much those numbers shrink each year.

IV. THE LARGEST INCUMBENT PROVIDERS' FLAWED ANALYSES OF MARKET STRUCTURES AND PERFORMANCE ARE BELIED BY THEIR OWN INVESTMENT DECSISIONS, RESULTS, AND CONDUCT

The largest carriers devoted considerable rhetoric to a discussion of the "vibrant" competition and "massive" investments that exist in the wireless industry.⁶¹ The initial comments from consumer groups offered actual data, not rhetoric, illustrating that such claims ignore reality. As the Public Interest Commenters' initial comments demonstrated, the largest wireless carriers enjoy enormous market share, invest at ever-dwindling levels, and rake in huge profits.⁶² Consumers suffer from a lack of effective competition through high prices, lengthy contracts backed by punitive fees, restricted choice of devices and plans, and severe limitations on the use of their services.

Perhaps the best example of the lack of competition in the wireless market comes from the nation's second largest carrier, AT&T, which spoke at length in its initial comments about its many network investments.⁶³ The company singled out iPhone related investment in particular, stating, "AT&T made many substantial investments to help make the iPhone an innovative product."⁶⁴ As a device, the iPhone has been a success: it is estimated that more than 10 million

⁶¹ CTIA Comments at 32, 60.

⁶² See, e.g., Public Interest NOI Comments at 13-14; Reply Comments of Consumer Federation of America, Consumers Union, Free Press, Media Access Project, the New America Foundation, and Public Knowledge, WT Docket No. 09-66, at 2 (filed July 13, 2009).

⁶³ See, e.g., AT&T Comments at 2.

⁶⁴ *Id.* at 58.

AT&T wireless customers use an iPhone,⁶⁵ the majority of whom have subscribed following the release of the second version in July 2008 (See Figure 1). Many likely discovered and chose the product in part because of a ubiquitous advertising campaign highlighting the ability to surf the web at considerable speeds.⁶⁶



Figure 1:⁶⁷ AT&T iPhone Additions Since Initial Launch

⁶⁵ Martin Peers, "AT&T Gets a Fuzzy Signal on Apple's iPhone," *Wall Street Journal*, Aug. 31, 2009.

⁶⁶ See, e.g., http://www.youtube.com/watch?v=fu7_hwVNhrk (last accessed Oct. 21, 2009). In fact, AT&T's CEO specifically touted AT&T's network during the iPhone launch, claiming that "iPhone customers will enjoy the best voice and data network in the Nation." *See* AT&T, Press Release, "AT&T and Apple Announce Simple, Affordable Service Plans for iPhone," June 26, 2007.

⁶⁷ Earlier figures are estimated, as they were not publicly disclosed by AT&T. *See* Chris Foresman, "AT&T reports smooth sailing on the iPhone front for Q1'09," *Ars Technica*, April 22, 2009 ("Foresman").

AT&T requires an iPhone subscriber to sign up for both a phone and data plan, a tactic AT&T has now extended to all its smartphone customers.⁶⁸ The minimum monthly cost for an iPhone subscriber is \$70 per month, and the average iPhone subscriber pays about \$95 per month.⁶⁹ This produces well over \$2,000 in revenue over the life of the two-year contract.⁷⁰ Through these high service fees, AT&T consumers are contributing substantially to carrier revenues to ensure the carrier has more than adequate resources to provision the network.

Despite this combination of high revenue and frequently touted investments, iPhone subscribers have consistently complained about the AT&T's network to which they are forced to subscribe.⁷¹ The reasons for these complaints can be found in the history of AT&T's treatment of the iPhone – which demonstrates a pattern of captive customers who cannot leave the network, and a last-minute, insufficient effort to try to placate those customers to avoid some of the media attention. Simply put, AT&T failed to invest in its network sufficiently – despite signing up many customers and recognizing the popularity of the device, and despite advertising its data and web surfing capabilities – and instead used its substantial revenue to report high operating margins and issue ever higher dividends to investors.⁷² In a more competitive wireless market – or in a market where consumers could have left AT&T's service behind and taken their

⁶⁸ See, e.g., Eric Zeman, "AT&T: Data Plans Now Required For All Smartphones," *InformationWeek*, Aug. 21, 2009.

⁶⁹ See, e.g., Foresman.

⁷⁰ See e.g. Jenna Wortham, "Customers Angered as iPhones Overload AT&T," *New York Times*, Sept. 2, 2009 ("Wortham").

⁷¹ See, e.g., Elinor Mills, "AT&T takes the phone out of iPhone," *ZDNet News*, Sept. 23, 2009; Wortham.

⁷² See e.g. AT&T, Press Release, "AT&T Declares Quarterly Dividend," Mar. 27, 2009 ("In December 2008, AT&T announced a 2.5 percent dividend increase, and 2009 is the 25th consecutive year in which the company has increased its quarterly dividend. In 2008, the company paid a total of \$9.5 billion in dividends to stockholders.").

devices with them to a competitor – this mistake on AT&T's part would have harmed the company financially instead of merely in the form of a few embarrassing news stories.

Well before its launch, AT&T recognized that the iPhone's Web browser and intuitive interface would result in a surge of data traffic.⁷³ Based on the unprecedented attention the iPhone received in the months before its launch, it was clear the network would see a considerable increase in data usage.⁷⁴ AT&T recognized this, in part, but rather than delay product launch or invest more aggressively in 3G, AT&T originally placed iPhone users on their 2G network – on which AT&T's CEO stated "[c]apacity won't be an issue. The network is ready."⁷⁵ AT&T attempted to bolster its aging 2G network before the launch,⁷⁶ yet early reviews of the iPhone found the network to be "excruciatingly slow."⁷⁷ One wonders whether a market frequently described as intensely competitive could, if such claims had merit, permit AT&T to release its flagship device while still relying on a technology the company first deployed in 2003⁷⁸ – but this is exactly what happened.

A year later, Apple introduced an iPhone with 3G connectivity, and AT&T advertised the product based on its much faster data speed as compared to the original device.⁷⁹ Despite a

⁷³ See Fred Vogelstein, "The Untold Story: How the iPhone Blew Up the Wireless Industry," *Wired*, Jan. 9, 2008.

⁷⁴ See e.g. Jefferson Graham, "iPhone mania nears fever pitch," USA Today, June 20, 2007.

⁷⁵ See John Markoff, "A Trade-Off on iPhone Data Speed," New York Times, June 29, 2007.

⁷⁶ See, e.g., Jonathan Schlaffer, "AT&T upgrades EDGE network before iPhone launch," June 29, 2007.

⁷⁷ David Pogue, "The iPhone Matches Most of Its Hype," *New York Times*, June 27, 2007; *see also* Tom Krazit, "WSJ', 'NYT' reviews say iPhone features overcome slow network," *CNET News*, June 26, 2007.

⁷⁸ See Cingular Wireless, Press Release, "Cingular Wireless Is First to The Edge," June 30, 2003. Cingular has since become AT&T's wireless division.

⁷⁹ See, e.g., Apple, Press Release, "Apple Introduces the New iPhone 3G," June 9, 2008.

pervasive advertising campaign, consumers quickly found that the device failed to live up to its billing.⁸⁰ Almost immediately, customer complaints appeared online over slow data speeds, dropped calls, and long-delayed text and voicemail messages.⁸¹ Although some of this was improved through device software upgrades,⁸² iPhone customers continued to report issues.⁸³ Although at times AT&T has blamed the heavy usage of iPhone customers for these problems, indicating concerns about the amount of bandwidth applications like Pandora would use,⁸⁴ AT&T simultaneously claimed that it had anticipated much larger data consumption growth than occurred.⁸⁵

Through all of these problems, consumers suffered. Customers paying AT&T on average \$95 per month, on the basis of a heavily advertised "fast" wireless device, did not get the experience they believed they had purchased. Yet, AT&T responded by signing up more iPhone customers, and charging them the same hefty monthly fees to use the same congested and underbuilt networks – problems further exacerbated by rising levels of 3G laptop users.⁸⁶

⁸⁰ See, e.g., http://www.youtube.com/watch?v=oaN1Nz1Dyls (last accessed Oct. 21, 2009).

⁸¹ See, e.g., "Apple, AT&T mum on iPhone 3G issues," CNet News, Aug. 11, 2008.

⁸² See, e.g., Prince McLean, "Apple: iPhone 2.0.2 update targets 3G issues," *Apple Insider*, Aug. 20, 2008; Marin Perez, "Apple Releases iPhone Update 2.1 To Fix Bugs," *InformationWeek*, Sept. 12, 2008.

⁸³ See, e.g., Ben Wilson, "iPhone 3G Signal Strength Problems Persist in OS 2.1," CNet – iPhone Atlas, Sept. 22, 2008; Gregg Keiz, "Users split over iPhone 2.1's impact on 3G dropped calls," ComputerWorld, Sept. 15, 2008; Om Malik, "My Big iPhone Break-up," GigaOm, Feb. 11, 2009.

⁸⁴ AT&T Response to Wireless Telecommunications Bureau Letter, DA 09-1737, RM-11361, RM-11497, at 5 (Aug. 21, 2009).

⁸⁵ Matt Kapko, "Communacopia: AT&T CTO John Donovan: Technology Have To Be Timed For ROI," *mocoNews.net*, Sept. 18, 2008.

⁸⁶ 3G laptop users went from 517,000 in the 3rd quarter of 2007 to almost 1.4 million in the 2nd quarter of 2009. *See* AT&T, "AT&T Financial and Operational Results," at 13 (July 23, 2009).

Every wireless operator knows how many users they have added in an area. Although there is mobility for wireless users, mobility is not so great as to defeat the ability of network operators to plan for increased usage by adding additional capacity at the tower and in backhaul – not in the form of systemwide upgrades, but rather in terms of localized, basic maintenance to ensure a robust network. By all accounts, AT&T failed to engage in such ongoing maintenance. Problems of congestion and oversubscription weren't fixed in days or even months. This lapse of planning did not just aggravate AT&T's customers. The phone's manufacturer, Apple, was "dumbstruck" after finding out the carrier intended to upgrade cell towers without making corresponding upgrades to backhaul capacity.⁸⁷

Ultimately, AT&T engaged in a pattern of behavior that dissatisfied its suppliers and its customers, and the carrier seemed far more interested in maintaining a veneer of service quality and speed than a substance of same. After all, AT&T can lock in new high paying subscribers for two years far more cheaply than it can provide those subscribers with an ongoing satisfactory experience. Such a sequence of events should have harmed AT&T's position and results in what the industry describes as "perhaps the most competitive consumer market in America."⁸⁸ Yet, AT&T reports continued to show substantial profits and customer acquisitions. This is not a sign of customer satisfaction but customer lock-in, produced by exclusive use of popular devices and lengthy contracts backed by punitive fees.

⁸⁷ Peter Burrows, "Can AT&T Meet iPhone Network Demands?" *BusinessWeek*, Aug. 23, 2009 ("Burrows").

⁸⁸ AT&T, Press Release, "AT&T Statement on FCC Chairman's Brookings Institute Speech," Sept. 21, 2009. As shown herein and in the comments of smaller wireless providers in this docket, this sentiment is completely divorced from reality.

The final act in this episode was the launch of the iPhone 3G S in July 2009. The company once again centered its campaign on speed (hence the "S").⁸⁹ The 3G S iPhone has the ability to transmit over more advanced HSPA technology, which offers theoretical download speeds of 7.2 Mbps – a fact AT&T advertised.⁹⁰ However, AT&T had yet to deploy this technology to a *single* location at the time of launch, despite referring to it as "primarily a software upgrade in the network."⁹¹ In fact, AT&T has only recently announced the six cities that will have this technology by the end of the year.⁹² The company estimates buildout to 90 percent of its 3G footprint won't be completed until the end of 2011.⁹³ This has moved beyond problems with competition and entered the realm of serious problems with transparency – a device is being advertised for its performance on a network that doesn't exist.

Meanwhile, despite industry claims about the U.S. wireless industry being "the most competitive and innovative in the world,"⁹⁴ more than *sixty* operators in nearly fifty countries have already deployed advanced HSPA technology.⁹⁵ This includes operators in places such as Egypt, Aruba, Kenya, Mongolia and Syria.⁹⁶ In fact, another forty-four international operators

⁸⁹ See, e.g., MG Siegler, "Say Hello To The iPhone 3G S – 'S' Is For Speed," *TechCrunch*, June 8, 2009.

⁹⁰ See, e.g., Glenn Fleishman, "iPhone 3G S features 7.2 Mbps, AT&T's network doesn't," *Macworld*, June 10, 2009.

⁹¹ "AT&T Q2 2009 Earnings Call Transcript," *Seeking Alpha* (July 23, 2009), at http://seekingalpha.com/article/150935-at-amp-t-q2-2009-earnings-call-transcript?page=-1.

⁹² AT&T, Press Release, "AT&T to Make Faster 3G Technology Available in Six Major Cities This Year," Sept. 9, 2009.

⁹³ Id.

⁹⁴ CTIA, Press Release, "Competition and Consumer Choice are Hallmarks of U.S. Wireless Industry," June 16, 2009.

⁹⁵ See Appendix attached hereto.

⁹⁶ Id.

have already deployed *more* advanced networks.⁹⁷ A Harvard Berkman Center for Internet & Society study on the international quality of American wireless networks, which was requested by the Commission for purposes of the National Broadband Plan, confirms these findings.⁹⁸

A similar situation occurred with other features promoted at the launch of the iPhone 3G S. Apple announced the iPhone would support both multimedia text messaging (MMS) and tethering – and although MMS was finally offered to customers on September 25, 2009,⁹⁹ AT&T has yet to indicate when tethering, the use of your mobile device as a computer modem, will be available to subscribers.¹⁰⁰ Meanwhile, *twenty-two* overseas operators were able to offer tethering the day the iPhone was announced,¹⁰¹ and *twenty-nine* overseas mobile operators were offering MMS from the launch date.¹⁰² In fact, despite being notoriously secretive, Apple notified AT&T nearly a *year* prior to the capability being introduced, and yet the carrier still was not ready to offer the service upon introduction.¹⁰³

⁹⁷ See GSM Association, "Networks and Devices Summary Sheet," Oct. 7, 2009.

⁹⁸ Specifically, the study found that the United States ranked *19th* amongst the 30 OECD countries in 3G subscribers per 100 inhabitants, trailing such countries as the Slovak Republic and Austria. *See Next Generation Connectivity: A review of broadband Internet transitions and policy from around the world*, The Berkman Center for Internet & Society, Draft, at 40 (Oct. 2009); *see also* FCC, News Release, "Harvard's Berkman Center to Conduct Independent Review of Broadband Studies to Assist FCC," July 14, 2009.

⁹⁹ Neil Hughes, "AT&T notifies iPhone users of impending MMS launch," *AppleInsider*, Sept. 22, 2009.

¹⁰⁰ Karl Bode, "Still No iPhone Tethering," DSLReports, Oct. 13, 2009.

¹⁰¹ Tim Conneally, "AT&T to be late on iPhone MMS, tethering," Betanews, June 8, 2009.

¹⁰² Karl Bode, "AT&T: MMS For iPhone Coming September 25," *DSLReports.com*, Sept. 3, 2009.

¹⁰³ Burrows.

With AT&T's network continuing to have problems, even with the delayed inclusion of these features, the company now offers customers the opportunity to purchase a femtocell.¹⁰⁴ A femtocell is a device that is placed in a customer's home and uses the customer's home Internet connection for backhaul of the network traffic, acting as a miniature cell tower in the user's home. So, a customer with difficulties using AT&T's network can now pay the company an additional fee in order to stop using AT&T's network. Although improved signal is certainly desirable, this hardly seems like a good deal for consumers.

Consumers are far from content with this equation. A recent survey found iPhone owners "love the device but hate the wireless service it's paired with."¹⁰⁵ AT&T's name received "very very loud boos" at the introduction for the iPhone 3G S.¹⁰⁶ Three different customers have filed lawsuits over the delayed deployment of MMS capabilities.¹⁰⁷ Adding insult to injury, AT&T blames its customers for the company's investment failures.¹⁰⁸ AT&T's CTO recently stated "[o]vernight we're seeing a radical shift in how people are using their phones."¹⁰⁹ But the only "radical" element in play here was AT&T's spectacular failure to perform adequate network maintenance and upgrades to anticipate demand. Claims that the mobile wireless industry is effectively competitive – let alone "fiercely" or "dynamically" so – simply cannot withstand scrutiny in light of AT&T's "success" in obtaining and retaining iPhone customers.

¹⁰⁴ See Adam Frucci, "3G MicroCells: Carriers Want You to Pay Extra to Fix Their Own Failures," *Gizmodo*, Sept. 21, 2009.

¹⁰⁵ Mark Walsh, "Smartphone Users Hate The Game, Not The Player," *MediaPost*, Sept. 30, 2009.

¹⁰⁶ See "WWDC 09 Keynote – Live Blog," Mac Life, June 8, 2009.

¹⁰⁷ Jim Dalrymple, "Apple, AT&T face yet another iPhone MMS lawsuit," *CNET News*, Aug. 29, 2009.

¹⁰⁸ See, e.g., John Herrman, "Hey, iPhone Users: Get Ready For Data Caps," Gizmodo, Oct. 8, 2009.

¹⁰⁹ Wortham.

CONCLUSION

For the foregoing reasons, the Public Interest Commenters join with the large majority of participants in this proceeding urging the Commission to collect additional data on, and then take action to eliminate, the existing barriers to entry and growth in the commercial mobile service market and adjacent markets. Market failures persist, and carrier conduct in the present marketplace indicates that competition is not robust enough. The Commission can and should collect additional data on the impediments to effective competition identified by the Public Interest Commenters, and also by smaller providers daily squaring off on uneven terms against the largest, most dominant nationwide wireless carriers. After evaluating that data and assessing the barriers to competitive entry and growth perpetuated by current market structures and carrier practices, the Commission should take measured but decisive steps to promote competition – improving the performance of the mobile wireless market and increasing its benefits to society.

Respectfully Submitted,

/s/ Matthew F. Wood

Mark Cooper Consumer Federation of America

Joel Kelsey Consumers Union

Ben Scott Chris Riley Free Press

Matthew F. Wood Parul P. Desai Media Access Project

Michael Calabrese Sascha Meinrath New America Foundation

Gigi Sohn Harold Feld Public Knowledge

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Matthew F. Wood Parul P. Desai Media Access Project 1625 K Street, NW Suite 1000 Washington, DC 20006 (202) 232-4300 Counsel for Consumers Union

Chris Riley Free Press 501 Third Street, NW Suite 875 Washington, DC 20001 *Counsel for Free Press*

Appendix A

Network Country	Network Name	HSDPA Data Rate	Network HSDPA Status	HSDPA Launch Date
Austria	3 Austria	7.2Mbps	In Service	1st September 2006
Ireland	3 Ireland	7.2Mbps	In Service	1st January 2007
Italy	3 Italy	7.2Mbps	In Service	1st February 2006
Sweden	3 Sweden	7.2Mbps	In Service	1st November 2006
Thailand	AIS	7.2Mbps	In Service	1st May 2008
Turkey	avea	7.2Mbps	In Service	1st July 2009
Latvia	Bite	7.2Mbps	In Service	1st June 2006
Lithuania	Bite	7.2Mbps	In Service	1st June 2006
Poland	Centertel (Orange)	7.2Mbps	In Service	1st December 2006
China	China Unicom	7.2Mbps	In Service	n/a
Taiwan	Chungwa Telecom	7.2Mbps	In Service	1st September 2006
Romania	Cosmote (zapp)	7.2Mbps	In Service	1st May 2008
	DST (Datastream			
Brunei	Technologies)	7.2Mbps	In Service	1st March 2008
Saudi Arabia	EAE (Mobily)	7.2Mbps	In Service	1st June 2006
Estonia	EMT	7.2Mbps	In Service	1st April 2006
Germany	E-Plus	7.2Mbps	In Service	1st January 2009
Egypt	Etisalat Mist	7.2Mbps	In Service	1st May 2007
Tajikistan	Josa Babilon Mobile	7.2Mbps	In Service	1st December 2008
Mongolia	MobiCom	7.2Mbps	In Service	1st April 2009
Bulgaria	Mobitel Bulgaria (Vodafone)	7.2Mbps	In Service	1st March 2006
Sri Lanka	Mobitel Lanka	7.2Mbps	In Service	1st December 2007
Slovenia	Mobitel Slovenia	7.2Mbps	In Service	1st December 2006
South Africa	MTN South Africa	7.2Mbps	In Service	1st March 2006
Japan	NTT DoCoMo	7.2Mbps	In Service	1st August 2006
Germany	O2 Germany	7.2Mbps	In Service	1st December 2006
Ireland	O2 Ireland	7.2Mbps	In Service	1st July 2008
Austria	ONE	7.2Mbps	In Service	6th June 2006
France	Orange France	7.2Mbps	In Service	1st October 2006
Romania	Orange Romania	7.2Mbps	In Service	1st June 2007
Slovakia	Orange Slovensko	7.2Mbps	In Service	1st September 2006
United Kingdom	Orange UK	7.2Mbps	In Service	1st February 2007
Luxembourg	P&T Luxembourg (LUXGSM)	7.2Mbps	In Service	1st May 2007
Hong Kong	PCCW (Sunday)	7.2Mbps	In Service	1st March 2007
Qatar	Qtel	7.2Mbps	In Service	1st July 2007
Canada	Rogers Wireless	7.2Mbps	In Service	1st November 2006
Kenya	Safaricom Kenya	7.2Mbps	In Service	1st May 2008
Saudi Arabia	Saudi Telecom/Al Jawal	7.2Mbps	In Service	1st January 2006
Aruba	SETAR	7.2Mbps	In Service	1st December 2007

Singapore	SingTel Mobile	7.2Mbps	In Service	1st May 2007
	Softbank (ex-Vodafone)			
Japan	Japan	7.2Mbps	In Service	1st October 2006
USA	Stelera Wireless	7.2Mbps	In Service	1st December 2007
Sweden	Svenska UMTS-Nat (Tele2)	7.2Mbps	In Service	1st April 2007
Switzerland	Swisscom	7.2Mbps	In Service	1st May 2006
Syria	Syriatel	7.2Mbps	In Service	n/a
Denmark	TDC Mobil	7.2Mbps	In Service	1st January 2008
Croatia	Tele2 - Croatia	7.2Mbps	In Service	1st June 2008
Argentina	Telecom Personal	7.2Mbps	In Service	1st May 2007
Spain	Telefonica Moviles	7.2Mbps	In Service	1st July 2006
South Africa	Telkom South Africa	7.2Mbps	In Service	1st December 2008
Greece	TIM Stet Hellas	7.2Mbps	In Service	1st November 2006
Macedonia	T-Mobile	7.2Mbps	In Service	1st June 2009
Croatia	T-Mobile Croatia	7.2Mbps	In Service	1st November 2006
Germany	T-Mobile Deutschland	7.2Mbps	In Service	1st March 2006
Hungary	T-Mobile Hungary	7.2Mbps	In Service	1st May 2006
United Kingdom	T-Mobile UK	7.2Mbps	In Service	1st July 2008
Uzbekistan	Ucell/Coscom	7.2Mbps	In Service	1st September 2008
Croatia	VIPnet	7.2Mbps	In Service	1st April 2006
South Africa	Vodacom South Africa	7.2Mbps	In Service	1st May 2006
Fiji	Vodafone Fiji	7.2Mbps	In Service	1st November 2008
Germany	Vodafone Germany	7.2Mbps	In Service	1st March 2006
Italy	Vodafone Italy	7.2Mbps	In Service	1st June 2006
New Zealand	Vodafone New Zealand	7.2Mbps	In Service	1st October 2006
Romania	Vodafone Romania	7.2Mbps	In Service	1st September 2007
Spain	Vodafone Spain	7.2Mbps	In Service	1st June 2006
Turkey	Vodafone, Turkey	7.2Mbps	In Service	1st July 2009
Kuwait	Watiniya Telecom Kuwait	7.2Mbps	In Service	1st December 2007

Source: GSM Association, "HSPA – High Speed Packet Access – Available Networks," 2009, available at http://hspa.gsmworld.com/networks/default.asp (accessed Oct. 21, 2009).