Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C.

In the Matters of	)	
	)	
A National Broadband Plan for Our Future	)	GN Docket No. 09-51
	)	
International Comparison and Consumer Survey Requirements in the Broadband Data Improvement Act	)	GN Docket No. 09-47
	)	
Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act	)	GN Docket No. 09-137

REPLY COMMENTS OF AT&T INC. — NBP PUBLIC NOTICE #1

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AT&T Inc., on behalf of itself and its affiliates (collectively, "AT&T"), respectfully submits these reply comments in response to the Commission's August 20, 2009 Public Notice,[1] which seeks comment on how "broadband" should be defined in the National Broadband Plan mandated by the American Recovery and Reinvestment Act of 2009 ("Recovery Act").[2]

DISCUSSION

In its opening comments, AT&T stressed that defining "broadband" is dependent on the context for which the term—and the underlying services—will be used. Many of the other comments here illustrate the significance of this point. In particular, many parties advocated aspirational definitions of broadband that would impose extremely high quantitative and qualitative minimum standards for any qualifying service. Free Press, for example, argues that a *minimum* definition of broadband must require the delivery of "5 megabits per second (Mbps) of bandwidth (in both the down and upstream directions)" at low latencies,[3] and recommends that, "for purposes of the National Broadband Plan" the Commission adopt an even more "aspirational definition of broadband . . . requir[ing] symmetrical bandwidths on the order of 100Mbps."[4] Similarly, Google notes that "5 or even 10 Mbps symmetric broadband capacity may be a sound initial target. . . ."[5]

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1 Public Notice, *Comment Sought on Defining "Broadband," NBP Public Notice #1*, DA 09-1842, GN Docket Nos. 09-47, 09-51, 09-137 (rel. Aug. 20, 2009).

2 American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115, div. B, tit. VI, § 6001(k)(2) (Feb. 17, 2009) ("Recovery Act").

3 Free Press Comments at 3. *See also id.* at 14 (because a typical home will contain multiple users on a LAN, "it may be more appropriate for the Commission to set the minimum threshold somewhere between 10 and 50 Mbps symmetrical").

4 *Id.* at 4.

5 Google Comments at 13; *see id.* at 6.

AT&T's concern with this approach is not that the particular targets have no place in regulatory policy: It may very well be appropriate in certain contexts to use aspirational or aggressive targets to promote R&D and deployment of next-generation services. But it is *not* appropriate to adopt an aspirational target as the one-size-fits-all definition of "broadband" for all purposes under the National Broadband Plan mandated by the Recovery Act,[6] which is the relevant context here. Doing so could have significant unintended consequences. If, for example, that definition were used to qualify the projects that would be eligible for any type of Recovery Act funding, many of the projects that would otherwise be ideally suited to advancing the goals of the Recovery Act would never see the light of day.

As AT&T has explained and as several other commenters note in this proceeding, "it may never be cost effective to deploy" the highest-speed systems in some of the country's most remote areas, and forcing national policy nevertheless to support such systems there based on an aspirational, one-size-fits-all definition of supportable "broadband" may produce systems that are too "cost-prohibitive for many potential subscribers."[7] In other words, while Free Press's aspirational target seeks to advance the broadband capabilities of "households . . . [with] multiple computers, gaming systems and mobile devices – all connecting to the Internet," those with "Microsoft Xbox 360" and "family members [seeking to] view separate content simultaneously,"[8] and the like, the unintended consequence of adopting such a definition would

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6 Recovery Act, § 6001(k) (setting out a number of goals that the National Broadband Plan must accomplish).

7 MSS/ATC Coalition Comments at 5. *See id.* at 3-4; Verizon and Verizon Wireless Comments at 6-7; Hughes and WildBlue Comments at 9; AT&T Comments at 2-4; *see also* Comments of AT&T Inc., *A National Broadband Plan for Our Future*, GN Docket No. 09-51, at 15-20 (filed June 8, 2009) ("*AT&T Broadband NOI Comments*"); Reply Comments of AT&T Inc., *A National Broadband Plan for Our Future*, GN Docket No. 09-51, at 76-80 (filed July 21, 2009).

8 Free Press Comments at 15-16.

be that unserved and underserved Americans in rural and hard-to-serve areas, or those who simply cannot afford the very fastest, newest services, will find themselves left even further behind. This result would directly undermine Congress's central goals in the Recovery Act.[9]

The same one-size-fits-all definition could also preclude funding or other support for a network of wireless smart electric meters that report on and analyze energy consumption patterns, notwithstanding that such a network would directly serve Congress's goal of using broadband to promote "energy independence and efficiency."[10] Such smart meters may need to transmit only relatively small amounts of data at relatively low broadband speeds during limited periods of the day or week. Thus, to cost-effectively facilitate a large-scale deployment of smart meters, relatively low-speed, *inexpensive* broadband connectivity may be far more important than access to the highest conceivable speeds at commensurately higher prices.[11] Indeed, no one could economically propose a 100 Mbps (or even a 5 Mbps) symmetrical smart meter deployment today, or a similar network for wireless medical monitoring, RFID inventory tracking, or other welfare-enhancing machine-to-machine (M2M) applications. Similarly, new

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[9] *See* Recovery Act, § 6001(b), (g)-(h), (k)(2) (expressing Congress's intent that broadband be made available to those in unserved and underserved communities and to low-income, unemployed, aged, and other vulnerable populations).

[10] *Id.* § 6001(k)(2)(D) (mandating that the National Broadband Plan promote "use of broadband infrastructure and services in advancing . . . energy independence and efficiency").

[11] *See generally* Robert Capps, Wired Magazine, *The Good Enough Revolution: When Cheap and Simple Is Just Fine* (Aug. 24, 2009), *available at* http://www.wired.com/gadgets/miscellaneous/magazine/17-09/ff_goodenough ("[W]hat consumers want from the products and services they buy is fundamentally changing. We now favor flexibility over high fidelity, convenience over features, quick and dirty over slow and polished. Having it here and now is more important than having it perfect. These changes run so deep and wide, they're actually altering what we mean when we describe a product as 'high-quality.' . . . [W]e're now focused on three things: ease of use, continuous availability, and low price. Is it simple to get what we want out of the technology? Is it available everywhere, all the time—or as close to that ideal as possible? And is it so cheap that we don't have to think about price? Products that benefit from [this] effect capitalize on one or more of these qualities. And they'll happily sacrifice power and features to do so.").

mobile technologies that might not yet (or ever) meet the arbitrary definitional requirements could be deterred altogether, notwithstanding the concrete benefits they might provide.[12]

An aspirational, one-size-fits-all definition could have other adverse consequences as well. Defining broadband as 100 Mbps to every home, business, and government office throughout the United States, without first assessing the actual needs of various end users or establishing an economically realistic means to support the costs of deploying broadband networks to achieve those speeds, would not serve the public interest. For example, if public-safety organizations were denied funding for a mobile broadband network designed to meet *their* needs but that did not satisfy some arbitrary, aspirational speed target, their needs might not be met for years, and the spectrum reserved for such projects would lie fallow. Moreover, "mapping" only one, arbitrary category of "broadband" services would produce an artificial picture of this country's broadband use and capabilities, since, as several commenters note, significant "consumer benefits . . . are derived" even "from 'first generation data'" services.[13]

Thus, as AT&T has stressed, the Commission must identify the regulatory context for which it seeks to define broadband. For purposes of the Recovery Act and the related policies that the Commission must consider and promote in the National Broadband Plan, the most important goal is ensuring 100% availability and access to services that will allow currently unserved and underserved Americans to participate in the Internet economy. Accordingly, as AT&T and other commenters have explained, any relevant definition of broadband must be keyed off an identified "basket of interactive applications and services" that all Americans

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12 *AT&T Broadband NOI Comments* at 17-20 & n.53. Free Press seems fully prepared for, and indifferent to, these results, arguing that satellite services "have no place in an aspirational National Broadband Plan" and "[m]obility is also not a valuable indicator for many Congressional and FCC policy goals" and thus the Commission should "ignore pleas to establish separate standards for services simply because they offer mobility." Free Press Comments at 8.

13 CTIA Comments at 8.

should have access to today, and that the Plan will therefore pursue as its key, immediate goal.[14] This "basket" likely includes email, the ability to access the Internet and download video and other media and information, and the ability to make use of e-government, educational, and other online resources.[15] The Recovery Act goals that go beyond consumer needs—energy, health care, and public safety, for example—likely require different types of applications that may require different service characteristics. The relevant definitions will likely change as the core "basket" of applications evolves over time, but at all times, the Commission must use the goals of the underlying regulatory programs or policies as the lodestone for determining the relevant categories of "broadband."

Again, as noted above, there may very well be specific regulatory contexts and distinct programs for which it would be appropriate to adopt a ramped-up definition of broadband based on the very aspirational targets Free Press and others propose. And the market will continue to drive the communications industry to pursue broadband technologies and deployment that go well beyond any minimum regulatory definitions: Indeed, AT&T will continue to be a leader in deploying the country's most advanced, high-quality networks and services. But the Recovery Act is targeted to projects and programs that can be deployed broadly where sorely needed, and other Commission policies and programs the Plan will advance must likewise deliver results to meet the present needs of residential, business, government, and M2M users. The definition of "broadband" adopted here must be designed, first and foremost, to advance those specific goals.

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14 Sprint Nextel Comments at 7; *see* AT&T Comments at 1, 4-6.

15 *See* Sprint Nextel Comments at 8; *see also* AT&T Comments at 1-2, 5-6; Hughes and WildBlue Comments at 2; Verizon and Verizon Wireless Comments at 6 (defining minimum applications that "facilitate other services" and "further important national interest[s]"); CTIA Comments at 8.

Respectfully Submitted,

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