Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C.

In the Matter of	)	
	)	
Inquiry Concerning Deployment of Advanced	)	
Telecommunications Capability to All Americans	)	CC Docket No. 98-146
in a Reasonable and Timely Fashion, and Possible	)	
Steps To Accelerate Such Deployment Pursuant to	)	
Section 706 of the Telecommunications Act of	)	
1996.	)	

COMMENTS OF BELL ATLANTIC[1]

I. Introduction and Summary

The Commission's Notice of Inquiry ("*NOI*") asks whether advanced telecommunications capabilities are being deployed to all Americans in a reasonable and timely fashion, and whether there are steps that could be taken to promote deployment to all Americans. The short answer is advanced telecommunications capabilities are being deployed by local exchange carriers (incumbents and new entrants alike), cable providers and others. Currently, cable providers serve 80 percent of the broadband market. Local exchange carriers also are deploying advanced telecommunications capabilities -- for example, Bell Atlantic is providing advanced services such as ADSL both directly to end users and on a wholesale basis to Internet Service Providers and others. But at present, they still lack the level of market penetration enjoyed by cable providers.

To accurately measure and evaluate deployment progress, the Commission should

[1] The Bell Atlantic companies ("Bell Atlantic") are Bell Atlantic-Delaware, Inc.; Bell Atlantic-Maryland, Inc.; Bell Atlantic-New Jersey, Inc.; Bell Atlantic-Pennsylvania, Inc.; Bell Atlantic-Virginia, Inc.; Bell Atlantic-Washington, D.C., Inc.; Bell Atlantic-West Virginia, Inc.; New York Telephone Company; and New England Telephone and Telegraph Company.

ensure that its definition of "advanced telecommunications capability" accurately captures the deployment efforts of all players in the broadband market, including cable and wireless providers, local exchange carriers and utility companies. The definition should also reflect evolving customer usage patterns. The current definition is too limiting to capture the most commonly-used advanced services applications offered by many providers. Rather than retain the definition's current minimum speeds in both the upstream and downstream directions, the Commission should adopt a more flexible definition that includes telecommunications capabilities in excess of 200 kilobits per second in either direction.

Although advanced telecommunications capabilities are being deployed, an important barrier to achieving even more robust deployment still exists. In particular, section 271's interLATA restrictions still hamper Bell companies' ability to accelerate their deployment efforts. The elimination of this regulatory burden would free the advanced services market to develop, and undoubtedly excel, unfettered by unnecessary government restraints.

II. The Commission Should Modify the Definition of "Advanced Telecommunications Capability."

The Commission currently defines "advanced telecommunications capability" as having the capability of supporting, in both provider-to-consumer (downstream) and consumer-to-provider (upstream) directions, a speed in excess of 200 kilobits (Kbps) in the last mile. *NOI* at ¶ 8. The Commission asks whether this definition is still valid and, if it is not, what factors should it deem relevant in deciding whether to change that definition. *Id.* In evaluating the continuing validity of the existing definition, the Commission should ensure that its definition adequately captures the technologies being

deployed by all players in the broadband market. Because cable providers have such a significant lead over other broadband carriers in terms of market penetration, any definition must adequately capture cable modem capabilities. The Commission must also consider public demand for high speed services and, in particular, the types of high-speed applications consumers are demanding.

Since the Commission's Advanced Services Report, the advanced services market has evolved and consumers' broadband needs, measured by consumer usage patterns, have come more clearly into focus. These patterns reveal that the Commission's current definition of "advanced telecommunications capability" is too limiting because it covers only those capabilities supporting both upstream and downstream speeds in excess of 200 Kbps. Rather than set minimum speeds in both directions for advanced telecommunications capabilities, the Commission should include within its definition any capability that is capable of supporting at least 200 Kbps in *either* the upstream or downstream directions.

Customer usage patterns reveal that one of the primary applications for advanced telecommunications capabilities, particularly in the residential market, is high-speed access to the Internet. This popular consumer application, for example, does not require speeds in excess of 200 Kbps in both directions to enable consumers to enjoy the benefits of high-speed technology. When accessing the Internet, consumers are using the originating or upstream path to send their Internet Service Provider minimal amounts of information by inputting Web addresses, typing several lines of data or transmitting e-mail. Consequently, a service's upstream speed need not be in excess of 200 Kbps to support swift Internet access because the de minimis amount of content typically sent

from consumer to provider does not require extensive bandwidth capacity to achieve rapid transmission.

However, many capabilities that support widely-used Internet access services would be excluded under the Commission's current definition because they lack speeds in excess of 200 Kbps in both directions. For example, many carriers, including a number of cable providers, have experienced success with capabilities which support services with upstream speeds less than 200 Kbps.[2]

In re-evaluating its definition of "advanced telecommunications capability," the Commission should not ignore dominant consumer usage patterns nor the types of technologies being deployed by key industry players. To do so, would be to distort the deployment picture for advanced telecommunications capabilities by arbitrarily excluding capabilities that are capable of supporting a primary application of high speed services, *i.e.* Internet access. As the advanced telecommunications market evolves, consumer demands and customer usage patterns will obviously shift, requiring the Commission to again revise its definition. But at this point, the Commission should adopt a more

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[2] For example, Comcast Online has announced it will impose a speed limit on its cable Internet service for Baltimore area customers that will cap the speed at which subscribers can pass data from their computers to the Internet at 128 kilobits per second. *Baltimore Sun*, Jan. 10, 2000. Similarly, the popular Direct PC service has begun offering a broadband Internet access service that provides a downlink speed of about 400 Kbps while accomplishing an uplink through a plain old telephone line.

flexible definition of "advanced telecommunications capability" as the capability of supporting at least 200 Kbps in either the upstream or downstream directions instead of setting minimum speeds for both paths.[3]

III. Deployment of Advanced Telecommunications Capabilities.

As the Commission recognized nearly a year ago, "[t]he most popular offering of broadband to residential customers is via cable modems offered by cable television companies . . ."[4] As of October 1999, cable modems were available in more than 100 local markets, including 25 of the 30 largest MSAs.[5] According to Tom Jermoluk, CEO, of Excite@Home, "[C]able technology today in the United States alone [has] well over a million installed subscribers already. By the end of the year [1999], [sic] a million and half subscribers or more."[6] Currently cable providers serve approximately 80 percent of the broadband market. While incumbent local exchange carriers are making steady progress in their roll-out of digital subscriber line technology, cable is still the dominant

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[3] While the Commission's definition of "advanced telecommunications capability" refers to upstream and downstream paths "capable of supporting a speed in excess of 200 Kbps in the last mile," the Commission uses other descriptive terms such as "advanced services" to refer to a larger subset of services that end users can access with speeds that are less than 200 Kbps. *See NOI* at n. 2. Notwithstanding the Commission's acknowledgement that certain "advanced services" have speeds that are less than 200 Kbps, the core definition of "advanced telecommunications capability" should nevertheless be modified to incorporate more flexibility by including technologies capable of supporting speeds of at least 200 Kbps in either direction.

[4] *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*, 14 FCC Rcd. 2398, ¶ 54 (1999).

[5] *See* Cable Datacom News, Commercial Cable Modem Launches in North America, http://cabledatacomnews.com/cmic/cmic7.html.

[6] *Digital Jam*, CNNfn (Oct. 19, 1999).

provider of broadband access services.[7] Local exchange carriers are doing their part to deploy broadband capabilities in competition with the cable incumbents. In order for them to compete effectively, it is critical that the Commission not impose one-sided regulatory burdens on local exchange carriers.

For example, Bell Atlantic continues to deploy its ADSL technology throughout its footprint. Bell Atlantic's deployment of ADSL capability has steadily increased since the Commission's initial inquiry. As of March 7, 2000, Bell Atlantic had equipped 794 of its central offices with ADSL capability.[8] By year end, Bell Atlantic projects that approximately 1,200 central offices will be equipped with ADSL technology.

Bell Atlantic has actively marketed its ADSL service both to end user residential customers and on a wholesale basis to Internet Service Providers who bundle it with their own information service offerings. While Internet Service Providers increasingly demand ADSL capabilities, many other business customers tend to rely more on higher speed, symmetrical services based on T1 and T3 technologies.

IV. The Exclusion of Bell Companies' Advanced Services From Section 271's InterLATA Restrictions Would Accelerate the Pace of xDSL Deployment.

Despite the gains that are being made in the deployment of advanced services, there are still factors that impede even faster deployment. Bell companies' efforts to deploy advanced services continue to be constrained by rules that were designed to

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[7] Dataquest analyst Patti Reali indicates cable modems have a significant lead over digital subscriber line technology. *See* S. O'Keefe, *Hot Tech Hoopla: Technology Information*, Telecommunications at 51 (Mar. 1, 1999).

[8] These central offices serve approximately 14,300,000 households and businesses. Due to technical limitations of Bell Atlantic's Infospeed DSL service, not all lines to the households served by these central offices will "qualify" for the service.

regulate traditional circuit-switched voice networks – not innovative, new advanced services.

As a general matter, providing Bell companies with interLATA relief for advanced services traffic would accelerate the deployment of advanced telecommunications capabilities by allowing Bell companies to offer an integrated package of local and interLATA advanced services. As the Commission recently acknowledged in its recent *Qwest/US West Merger Order*, CC Docket No. 99-272, FCC 00-91, ¶ 60 (rel. March 10, 2000), "the combining of US West's expertise in providing xDSL to the local loop with Qwest's high speed, high-capacity network will expedite deployment of advanced services and on a broader basis than US West could have offered alone."

In addition, by requiring certain advanced telecommunications equipment to be deployed on a LATA-by-LATA basis, section 271's interLATA restrictions prevent Bell companies from adopting more efficient equipment deployment strategies that could ultimately reduce consumer costs. For example, due to interLATA constraints, Bell Atlantic can not deploy its advanced services facilities in the most efficient manner. To facilitate its ADSL technology, Bell Atlantic connects its DSLAMs in central offices to ATM switches. These ATMs hand-off the aggregated, packetized traffic received from DSLAMs to Internet Service Providers. Because Bell companies are restrained by interLATA restrictions, Bell Atlantic is forced to deploy an ATM in every LATA so that interoffice links between central offices can be aggregated on a LATA-by-LATA basis.

With interLATA relief, Bell Atlantic could aggregate traffic from multiple LATAs and deploy ATM switches in a manner that more efficiently uses the Internet

backbone and interoffice facilities. But, by forcing Bell Atlantic to place an ATM switch in every LATA, the interLATA restrictions force Bell Atlantic to expend unnecessary capital which artificially raises service costs. These increased costs slow ADSL deployment and impede consumer adoption of advanced services.

IV. Conclusion

For all of these reasons, the Commission should conclude that, consistent with section 706 of the Act, advanced telecommunications capabilities are being deployed in a reasonable and timely manner to all Americans, but that additional steps, such as interLATA data relief, would further accelerate that deployment.

Respectfully submitted,

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March 20, 2000