

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C.

In the Matter of )  
 )  
Deployment of Wireline Services Offering ) CC Docket No. 98-147  
Advanced Telecommunications Capability )  
 )  
Further Notice of Proposed Rulemaking )

**BELL ATLANTIC'S REPLY COMMENTS IN RESPONSE TO**  
**COMMENTS ON ITS PETITION FOR CLARIFICATION AND/OR**  
**RECONSIDERATION**

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BELL ATLANTIC’S<sup>1</sup> REPLY COMMENTS IN RESPONSE TO COMMENTS  
ON ITS PETITION FOR CLARIFICATION AND/OR RECONSIDERATION

I. Introduction and Summary

A number of commenters have mischaracterized Bell Atlantic’s Petition as an attempt to circumvent or delay the Commission’s *Line Sharing Order*.<sup>2</sup> But Bell Atlantic is committed to meeting its obligations under the *Order*. Bell Atlantic’s Petition is designed to clarify certain issues to ensure that the implementation of line sharing will be completed as smoothly as possible and in a manner that meets the industry’s needs. The Commission’s *Order* did not and could not have contemplated all of the various technical and operational issues associated with implementing line sharing. As the industry works through these issues, it should have the flexibility to adopt whatever deployment schedule will best accommodate its needs. Accordingly, Bell Atlantic asks only that the

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<sup>1</sup> 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.

<sup>2</sup> *Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Third Report and Order in CC Docket No. 98-147 and Fourth Report and Order in CC Docket No. 96-98, FCC 99-355 (rel. Dec. 9, 1999) (“*Order*”).

Commission clarify that the industry has the flexibility to adopt an alternative deployment schedule for line sharing if it determines, through a cooperative process, that such a schedule is appropriate. The comments demonstrate that this issue requires clarification because some commenters believe the industry already has such flexibility (Broadspan at 7) while others do not. *See Covad at 4.*

As for the remaining issues raised in Bell Atlantic's Petition, no commenter has put forth technical evidence disproving the well-established engineering principle that the removal of load coils from loops over 18,000 feet will significantly degrade the voice service. This confirms that incumbent carriers need not re-prove this fact to each and every state commission, and no purpose would be served by requiring them to do so.

Some commenters claim they want access to the entire loop frequency to perform metallic loop tests. But no carrier has demonstrated that such a test is needed in order to provide data service on the high frequency portion of the loop.

Finally, by arguing that incumbent carriers do not have sufficient market incentives to upgrade their networks and phase out AMI T1 technology, a number of commenters fail to appreciate the market realities in today's highly competitive advanced services market. The reality is that the market will force all competing carriers to upgrade their networks where it is economically efficient to do so. But it is the market that has to be allowed to determine what is economically efficient - not regulatory fiat.

II. The Commission Should Clarify That The Industry, Through A Cooperative Process, Has the Flexibility to Adopt A Modified Deployment Schedule To Implement Line Sharing.

In its Petition, Bell Atlantic asked the Commission to clarify that nothing in its *Order* precludes industry members from adopting a phased-in deployment schedule for line sharing if the industry determines, through a cooperative process, that the agreed-upon schedule will best allow efficient deployment of line sharing, regardless of whether that schedule coincides with the Commission's 180-day targeted date. Bell Atlantic Petition at 2. Certain parties (MCI and others) have misconstrued this request as a request for an extension of time. MCI at 7. MCI claims that absent an incumbent carrier filing a specific waiver for an extension of time, the implementation time line in the *Order* can not be modified. Still other commenters claim industry flexibility is unnecessary because the Commission has already considered all of the relevant issues that might impact the implementation schedule. Rhythms at 6, AT&T at 8. However, these commenters fail to understand the nature of Bell Atlantic's request.

First, Bell Atlantic's Petition did not seek an extension of time. Bell Atlantic will offer line sharing at the conclusion of the 180-day time frame estimated in the *Order*. Bell Atlantic asks only that the Commission confirm that notwithstanding its finding that 180 days "should" be sufficient to implement line sharing, Bell Atlantic and the industry working through a cooperative process have the *flexibility*, should it become necessary, to adopt an alternative deployment schedule for some aspects of the line sharing process *if*

such schedule would better accommodate the industry's needs.<sup>3</sup>

Second, it is critical that the industry have flexibility in implementing line sharing. Rhythms and AT&T suggest there would be no need for the industry to adopt an alternative deployment schedule because the operational issues associated with line sharing were extensively briefed in the underlying proceeding. Rhythms at 6, AT&T at ii. But these carriers ignore the Commission's own words, which reflect the need for industry cooperation given the complexity of line sharing. *See Order* at ¶ 128. (“[W]e urge requesting carriers and incumbent LECs to engage in a collaborative process at the regional level to develop solutions to incumbent LEC provision of shared line access.”). Given the Commission's recommendation for industry cooperation, Bell Atlantic and other carriers are currently working together to craft the details of line sharing implementation and develop solutions to address the industry's needs.

The *Order* did not address important issues regarding the implementation process. For example, although the *Order* does not contemplate that more than one network configuration would be necessary to implement line sharing, it has become apparent that different data carriers desire different service/network configurations. In addition to the request for multiple network configurations, the collaborative process has also identified important issues relating to competing carriers' deployment priorities and a myriad of other issues not explicitly addressed in the *Order*, but that affect the implementation of line sharing.<sup>4</sup>

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<sup>3</sup> Such an alternative deployment schedule would not mean that line sharing would not be available at the conclusion of the Commission's 180 days but rather could, for example, involve a negotiated plan to stagger the deployment of certain line sharing configurations among different regions based on data carriers' deployment priorities, service configurations, or other such variables.

<sup>4</sup> Another important issue not addressed in the *Order* is how to coordinate the implementation of line sharing within the Commission's 180-day estimated time frame given existing scheduling requirements for collocation.

As the 180-day targeted date draws near, industry participants may find it necessary to adopt a negotiated deployment schedule that incorporates the different network configurations and service needs of multiple data carriers. The industry must have the flexibility to address these issues by tailoring the Commission's deployment schedule, if necessary. Consequently, the Commission should ignore efforts of certain commenters to minimize the need for industry flexibility.<sup>5</sup>

Finally, contrary to some commenters' continual reference to an "180 day deadline," the *Order* does not contain an absolute deadline for implementing line sharing. Covad erroneously claims that the Commission "concluded that incumbent LECs *must* make line sharing fully available . . . by a date certain." Covad at 4. Emphasis added. But the language in the *Order* does not indicate that the Commission's 180-day timeline represents an absolute deadline. Rather, the *Order* repeatedly states that incumbents "*should* be able to provide line sharing within 180 days of release of this Order" not that they "must" do so, as Covad claims. See *Order* at ¶ 13 see also ¶ 161. Emphasis added. The *Order's* use of the permissive term "should" instead of "must" suggests that the 180-day time frame is at best a target or estimated timeline which the Commission deems should be sufficient for implementation. That the Commission's time frame can only be a target date makes sense because, the *Order* does not specifically lay out the precise steps for implementing line sharing. Rather, after providing a general framework, the

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<sup>5</sup> Several commenters question the scope of Bell Atlantic's request. AT&T notes it is unclear to whom Bell Atlantic is referring when it speaks of the "industry." AT&T at 8. The "industry," to which Bell Atlantic refers for purposes of developing a deployment schedule, consists of those carriers that have chosen to participate in the DSL Collaborative under the direction of the New York state commission.

*Order* appropriately defers to the industry to work out the details of actual implementation in a cooperative process. *See Order* at ¶128.<sup>6</sup>

Given the *Order's* deferral to the industry for implementation of line sharing, Bell Atlantic asks only for clarification that if the industry has not ironed out every last detail, that members of the collaborative can determine when and how certain aspects of line sharing are to be implemented.

III. The Commission Should Not Require Incumbent Carriers to Prove That Conditioning Loops Over 18,000 Feet Will Significantly Degrade Voice Service.

No commenter disputes that, without the addition of load coils, voice quality deteriorates as loop length increases or that xDSL will not work over a copper loop with load coils. Nor do any commenters contend that the engineering standards used to build the incumbent carriers' analog voice network - which require the placement of load coils on loops over 18,000 feet - are not the appropriate standards to follow for the

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<sup>6</sup> While Rhythms correctly notes that the record contains extensive discussions about how incumbents *could* implement line sharing, there is a big difference between hypothesizing about potential ways to configure the network to provision line sharing and actually sitting down with other carriers to nail down, step by step, the blueprint for such implementation. The latter is a process that Bell Atlantic and data carriers are currently undertaking in the DSL Collaborative. It is also becoming clear that many of data carriers' underlying assumptions, such as the notion that existing system capabilities could readily accommodate line sharing, have proven incorrect.

foreseeable future.<sup>7</sup> In the face of these undisputed facts, several commenters nonetheless try to confuse the issue by noting that xDSL technology can work on loops over 18,000 feet or that voice over xDSL technology can also work on such long loops. But these claims do nothing to undermine the basic principle that the removal of load coils on loops over 18,000 feet will significantly degrade voice service.

MCI and TRA point to several irrelevant examples in support of their claim that incumbent carriers should affirmatively prove on a state-by-state basis that conditioning loops over 18,000 feet will significantly degrade the voice service. First, MCI points out that, in testing situations, voice over xDSL technology has provided sufficient voice quality on loops up to 28,000 feet. MCI at 6. But MCI misses the point. In a line sharing scenario, it is analog voice service -not voice over xDSL technology - that is at issue because the data service will be provided on top of the customer's existing, *analog* voice service. Accordingly, the relevant inquiry is whether the analog voice service would be significantly degraded if the load coils are removed from loops over 18,000 feet to accommodate xDSL on the high frequency portion of the loop. The capabilities of

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<sup>7</sup> AT&T originally adopted the engineering design/practice of placing load coils on loops over 18,000 feet decades ago. The basic engineering principles AT&T relied upon in selecting 18,000 feet as the point after which voice service will suffer unacceptable loss without load coils remain unchanged today. Although the matter has been discussed in isolation in this proceeding, the use of load coils on loops over 18,000 feet was but one of several engineering design criteria (such as gauge specifications on copper facilities) adopted by AT&T to ensure voice quality. *See* Notes on Distance Dialing; American Telephone and Telegraph Company, Engineering and Network Services Department, Systems Planning Section; AT&T, 1975 at 20, *see also* Telecommunications Transmission Engineering, Volume 3 - Network and Services, AT&T, 1975 at 92 (“Control of total resistance does not ensure a satisfactory transmission loss distribution unless some additional rules are followed. These include loading all loops over 18 kilofeet...”); Engineering and Operations in the Bell System - Bell Telephone Laboratories, 1977, at 298, table 10-2 Loop Layout Rules, (“All loops of 18 kilofeet or longer should be loaded.”)

voice over xDSL technology are simply irrelevant in that context.<sup>8</sup> TRA claims Bell Atlantic ignores record evidence that lines over 18,000 feet are now compatible with certain xDSL transmission technologies. TRA at 4. Bell Atlantic does not dispute that there are xDSL technologies that can operate on loops over 18,000 feet, but these technologies cannot do so if the loop contains load coils. And removal of these devices on loops over 18,000 feet will significantly degrade the voice service.

Because no commenter has presented any technical evidence refuting the well-established and time-honored fact that voice service will be degraded with the removal of load coils on loops over 18,000 feet, the Commission should reconsider its decision to require incumbent carriers to make an affirmative showing to that effect. To the extent that requesting carriers claim that voice service will not be degraded by removing load coils on loops over 18,000 feet, the burden of proving that point should rest with those requesting carriers. Accordingly, if the Commission fails to conclusively determine that conditioning loops over 18,000 feet will significantly degrade the voice service, it should at the very least shift the burden to the requesting carrier by creating a rebuttable presumption to that effect, *i.e.* require the requesting carrier to prove that conditioning

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<sup>8</sup> MCI also claims that voice service can be provided without significant degradation of voice on loops of up to 20,000 feet. MCI at 6. But MCI cites no industry standard or technical evidence demonstrating that 20,000 feet would be a more appropriate voice loss point for engineering design purposes than the 18,000 foot engineering standard for analog voice networks. *See supra* n. 7.

loops over 18,000 feet will *not* significantly degrade voice service.<sup>9</sup> Northpoint notes it “does not oppose, on an appropriate showing, a revision to the Line Sharing Order that would permit a shift of the burden from an incumbent to a competitive LEC, of demonstrating that conditioning is appropriate.” Northpoint at 13. Such a presumption would conserve state administrative resources by requiring the requesting carrier to prove any exceptional circumstances, if it can, in which conditioning a loop over 18,000 feet will not significantly degrade the voice service rather than forcing incumbent carriers to prove the general rule to the contrary. Such a presumption would also satisfy commenters’ concern that incumbent carriers not be the final arbiter of whether a loop is eligible for line sharing.

IV. Data Carriers In a Line Sharing Arrangement Do Not Need The Ability To Test the Entire Loop Frequency Because They Are Not Responsible for Maintenance of the Physical Loop Plant.

Bell Atlantic asked the Commission to clarify that data carriers in a line sharing arrangement were not entitled to access the entire loop frequency for testing purposes because such broad test access was unnecessary for the provisioning of a data service residing only on the higher frequencies. While a number of competing carriers contend they need test access to the entire loop frequency to perform metallic loop testing (“MLT”), none adequately explains why MLT testing is necessary to install, repair and test data services *on the higher frequencies*. Instead, several commenters, relying on a

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<sup>9</sup> AT&T also notes that it does not oppose a modification of the Commission’s rules regarding loop conditioning where voice degradation is a legitimate issue. AT&T at 12. However, for purposes of determining significant degradation of the voice service, AT&T favors the use of a loop’s voice loss characteristics over its length. But the engineering standard AT&T previously adopted – *i.e.* that loops over 18,000 feet need load coils -, which is the basis for current network design, was based upon a host of general engineering assumptions including analog voice loss characteristics. *See* Telecommunications Transmission Engineering, Volume 1, AT&T, 1974 at 601-603; AT&T, 1974 (“Control of loop loss is accomplished by the application of carefully specified rules in the design of loops and layout that produce a satisfactory distribution of losses...When the plans are properly applied, the resulting distribution of loop losses has a maximum value of about 9 dB.”)

misguided notion of parity, simply point to the fact that they should have the ability to perform MLT tests because incumbent carriers can do so.

MCI's and ALTS's primary claim for why data carriers must be able to perform MLT tests, which monitor the underlying physical loop facility and require access to the entire loop frequency, is because incumbent carriers can perform such tests on their own line shared loops. ALTS at 7, MCI at 3. But, as Bell Atlantic explained in its Petition, in a line sharing arrangement incumbent carriers and data carriers have different responsibilities for the loop. In a line sharing arrangement, the incumbent carrier must be able to perform MLT tests because it retains responsibility for provisioning and repairing the underlying loop plant. In contrast, the data carrier is only responsible for the provisioning of its data service on the higher frequency portion of the loop - not the integrity of the underlying, physical loop. Consequently, because data carriers and incumbent carriers are not similarly situated in a line sharing scenario, data carriers do not require the ability to perform MLT tests.<sup>10</sup>

V. Market Forces Are Sufficient to Ensure That Incumbent Carriers Upgrade Their Networks in a Timely and Non-Discriminatory Manner.

In response to Bell Atlantic's argument that state commissions should not be able to dictate how and when incumbent carriers should upgrade their networks, several

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<sup>10</sup> MCI claims tests of only the higher frequency portion of the loop do not provide sufficient information for data carriers to "troubleshoot, repair or maintain a customer's data service." MCI at 4. Because MLT tests monitor the physical loop plant, MCI apparently is arguing that the data service might be hampered by problems associated with the physical loop plant. However, MCI fails to recognize that, to the extent that problems with the physical loop plant impact a data carrier's service, the data carrier must still rely on the incumbent carrier to fulfill its obligations to maintain the integrity of the physical loop. Consequently, because incumbent carriers have sole responsibility for maintenance and repair of the physical loop plant, there is no reason for data carriers to have access to the entire loop frequency to perform MLT tests.

commenters argue that market forces provide inadequate incentive for incumbent carriers to retire or relocate older technologies such as AMI T1. *See* Northpoint at 15, TRA at 6, Covad at 11. These commenters claim that incumbent carriers will have no incentive to retire or relocate older technologies that interfere with advanced services because they will want to preserve older, allegedly higher-revenue producing technologies like AMI T1. Notwithstanding their arguments here that incumbent carriers are trying to forestall deployment of new technologies, these are the same commenters that argue incumbent carriers have a substantial advantage in xDSL deployment and that the Commission should take immediate action to require line sharing to prevent incumbent local exchange carrier dominance of the advanced services market.<sup>11</sup>

Covad claims the interfering qualities of AMI T1 “infect binder groups so as to bar the deployment of most competitive DSL services.” Covad at 11. But the interfering qualities of AMI T1 are not limited to competitive carriers’ xDSL services. The presence of AMI T1 in a binder group also prevents incumbent carriers’ from deploying their own new, innovative technologies, such as ADSL, in that binder. Accordingly, incumbent carriers have ample incentive not to stall the retirement of AMI T1.

Northpoint acknowledges that “[r]eliance on marketplace forces to influence a carrier’s decisions on modifications to its network would make sense if the carrier faced a competitive market.” Northpoint at 15. There is no doubt that incumbent local exchange carriers face a competitive advanced services market, given the aggressive deployment of

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<sup>11</sup> *See* Covad Comments, CC Docket 98-147, filed June 15, 1999 at 3 (“ILECs are attempting to lock up the market for DSL services . . .”); AT&T at 9 (“By all accounts, the ILECs’ DSL activities are progressing even more rapidly today than the Commission was aware of when it adopted the *Line Sharing Order*.”).

such services by other wireline xDSL carriers as well as cable operators. In the highly competitive advanced services arena, market forces can and do influence network decisions made by incumbent local exchange carriers. If incumbent local exchange carriers are to compete effectively in the advanced services market, they can not afford to delay upgrades to their network.<sup>12</sup> But the Commission should rely on the market rather than regulatory fiat to drive the efficient rehabilitation of incumbent carrier networks to accommodate new technologies.

In short, given the Commission's obligations under the Act to reduce unnecessary regulation and the presence of real market incentives for incumbent carriers to expeditiously phase out AMI T1 technology, there is no need for the Commission to establish an additional layer of regulation by permitting state commissions to dictate when and how incumbent carriers upgrade their networks.

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<sup>12</sup> In fact, market forces are already working in Bell Atlantic's case. Since July 1998, Bell Atlantic's policy has been not to design new AMI T1 carrier spans.

VI. Conclusion

For all of these reasons, the Commission should grant Bell Atlantic's Petition for Clarification and/or Reconsideration of the *Order*.

Respectfully submitted,

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