

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

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of )  
 )  
Deployment of Wireline Services Offering )  
Advanced Telecommunications Capability )  
 )

CC Docket No. 98-147

To the Commission:

**COMMENTS OF**  
**NETWORK ACCESS SOLUTIONS, INC.**

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SUMMARY

In this proceeding, the FCC advances a number of proposals designed to promote competition in the market for DSL and other "advanced telecommunications services." The centerpiece of the proceeding is the Commission's proposal to give incumbent LECs the option of providing DSL service either through their LEC, subject to the regulatory requirements of Section 251, or through a separate affiliate which would be subject only to the Commission's non-dominant carrier regulation.

NAS strongly believes that incumbent LECs should be given no choice -- that they should be *required* to provide DSL service through a separate affiliate if they wish to enter the DSL market. An incumbent LEC's separate DSL affiliate will be on an equal footing with its DSL competitors, and as a result the affiliate will be forced to play by the same rules as the LEC imposes upon its competitors -- rules for physical collocation and access to unbundled network elements and operations support systems -- rules that today are being used to frustrate competition and deprive the public of valuable services.

Mandating that incumbent LECs provide DSL service through a separate affiliate is far more effective at promoting competition in the DSL market than attempting to regulate every aspect of incumbent LECs' relationships with their DSL competitors. When an incumbent LEC's DSL affiliate is forced to deal with the LEC on the same terms as all other DSL providers, the incumbent LEC will be unable to maintain conditions that render the provision of competitive DSL service uneconomic. By contrast, allowing incumbent LECs the option of providing service through their

LEC will perpetuate the price squeeze that exists today, in which incumbent LECs can dictate unreasonable rates, terms, and conditions to their competitors while offering cross-subsidized service at lower rates than their competitors can match. No amount of well-intentioned regulation can completely foreclose incumbent LECs from exploiting their bottleneck monopoly to frustrate competition in the DSL market.

The Commission should, however, address certain central aspects of the relationship between incumbent LECs and competitive DSL providers. In these comments, NAS advances a number of suggestions to improve the Commission's collocation policies. Collocation is critical to the provision of DSL service, and represents a far greater proportion of the cost to provide DSL service than to provide telephone service. Accordingly, more efficient collocation translates directly into lower prices for DSL service.

To improve its collocation policies, the Commission should require each incumbent LEC to allow DSL carriers to physically collocate their DSL electronics in the same room where the LEC places its own equipment, an arrangement that NAS terms "common room collocation." LECs should be required to refund part of a DSL carrier's non-recurring physical collocation costs if that DSL carrier converts to more efficient common room collocation within a reasonable time after that option becomes available. The Commission should prohibit LECs from assessing a DSL carrier more than its directly attributable share of non-recurring physical collocation costs and should cap those costs at a reasonable level. All collocators in a central office who desire to interconnect their networks should have a right to install their own interconnecting cable regardless of where they are

located in the central office. Finally, the Commission should add new measures to its existing rule that LECs claiming exhaustion of physical collocation space should be required to prove that physical collocation space does not exist.

NAS also suggests ways in which the Commission can improve its policies regarding the provisioning of unbundled loops for DSL service. The Commission should require that LECs give DSL carriers the specific information they need about available loops during the pre-ordering process. LECs should be required to let carriers place DSL line cards in remote terminals and should unbundle the distribution and feeder elements of loops provisioned through digital loop carriers as separate network elements. LECs should adopt a binder group frequency management program, and should withdraw their local area data service offerings, to ensure that loops used to provide other services do not interfere with loops used to provide DSL service in the same binder group. Finally, the Commission should require LECs to unbundle the data and voice transmission frequencies on any loop used by the LEC to provide exchange service.

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To the Commission:

**COMMENTS OF  
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Network Access Solutions (“NAS”) files these comments in response to the Notice in this proceeding.<sup>1</sup> In that Notice, the Commission proposes to adopt regulatory policies to facilitate development of competition in the market for DSL and other “advanced telecommunications services” provided by “wire.” This fall, NAS will begin providing DSL service on a commercial basis within Bell Atlantic’s exchange service territory. DSL service is an “advanced telecommunications service” provided by “wire.” NAS will make DSL service available to the public by purchasing unbundled loops, central office collocation arrangements, and OSS from Bell Atlantic. By the end of this year, NAS will have deployed a network technically capable of serving more than one million subscribers, and will have quadrupled in size by early next year.

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1. Notice of Proposed Rulemaking, CC Dkt. No. 98-147 (FCC 98-188, rel. Aug. 7, 1998).

In these comments, NAS asks the Commission to adopt the following regulatory policies in order to facilitate development of DSL competition, and the company explains why the benefits of adopting these policies outweigh the costs:

- ◆ A LEC should be permitted to provide DSL service solely through a separate affiliate;
- ◆ All carriers providing DSL service should be allowed to physically collocate their DSL electronics in the same room where LECs place their own electronic equipment;
- ◆ LECs should be required to refund part of a risk taking DSL-provider's non-recurring physical collocation costs if that DSL-provider converts to a common room physical collocation arrangement within 90 days after common room collocation becomes available;
- ◆ The Commission should prohibit LECs from assessing a DSL provider more than its directly attributable share of non-recurring physical collocation costs and should cap those costs at \$35,000 for a 100-square foot collocation arrangement;
- ◆ All collocators in a central office who desire to interconnect their networks in that office should have a right to install their own interconnecting cable wherever they are located in the office;
- ◆ The Commission should put teeth in its existing rule requiring LECs to prove that physical collocation space does not exist when those LECs claim an absence of such space as the basis for denying a collocation application;
- ◆ During the loop pre-ordering process, LECs should be required to give carriers providing DSL service the specific information they need about available loops;
- ◆ The Commission should require LECs to let carriers place DSL line cards in remote terminals and obtain the distribution and feeder portions of a loop provisioned through a remote terminal as separate network elements.
- ◆ The Commission should ensure that loops used to provide other services do not cause interference to loops in the same binder group used to provide DSL service by requiring LECs to adopt a binder group frequency management program and withdraw their local area data service offerings.

- ◆ The Commission should make clear that a LEC may not offer DSL service on a bundled basis with exchange service if both offerings are provided on the same loop, and it should require LECs to provide other carriers with unbundled access to the data transmission frequencies on any loop used by the LEC to provide exchange service.

We discuss each of these policies below.

**I. The Commission Should Require, Not Merely Permit, LECs to Provide DSL Service Through a LEC Affiliate**

The first rule that the Commission should adopt is one *requiring* incumbent local exchange carriers ("LECs") to provide DSL service through a separate affiliate. Although the agency proposes in the Notice to give LECs a right to provide DSL service through a separate affiliate, it does not *require* that they do so. Instead, the agency's proposal would permit each LEC to choose for itself between providing service through an affiliate or through the LEC. If DSL service were provided through the LEC, DSL functionalities would be subject to the unbundling requirements of Section 251(c), and the LEC's retail DSL service would be subject to the resale requirement set forth in that section. In addition, the LEC's retail DSL service prices would be subject to the same dominant carrier rate regulation rules that apply to any other telecommunications service provided by that LEC. If DSL service were provided through a separate affiliate, by contrast, the affiliate would be free of the regulatory requirements imposed by Section 251(c), and its retail DSL rates would be subject to the Commission's non-dominant carrier regulation rules. But the LEC would be required to treat the affiliate the same way that it treats all other carriers that provide DSL service.

**A. Allowing LECs to Provide DSL Service Through the LEC Will Frustrate the FCC's Objective of Facilitating Competition in the DSL Market**

While the Notice proposed to facilitate competition in the DSL market by allowing LECs to provide DSL service either through their LEC or through a separate affiliate, leaving that choice to LECs actually would frustrate that objective for reasons discussed below. By contrast, requiring LECs to provide DSL service through a separate affiliate of the sort the agency has proposed will help the agency accomplish its goal.

Giving LECs the right to decide for themselves whether to provide DSL service either through their LEC or through a separate affiliate would frustrate development of competition in the DSL service market since substantially all LECs would choose to provide DSL service through their LEC given that it is easier for LECs to monopolize the DSL market by providing DSL service in that manner. The FCC has permitted LECs to engage in a large variety of discriminatory practices when providing DSL service through their LEC while making clear that all such discrimination would be flatly barred when service is provided through an affiliate. For example, the FCC has permitted Bell Atlantic to place its DSL service competitors in a price squeeze by allowing the company to provide DSL service through its LEC without allocating *any* collocation or loop costs to its DSL offering even though loop and collocation costs, a direct cost of providing DSL service, constitute about 35 percent of the total cost to provide service by Bell Atlantic's DSL competitors.<sup>2</sup> By contrast, failure

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2. See Bell Atlantic Telephone Companies Tariff No. 1, Trans. No. 1076, *Order Suspending Tariff and Designating Issues for Investigation*, CC Dkt No. 98-168 (Sept. 15, 1998) (ordering an investigation into whether Bell Atlantic's DSL service is interstate service but (continued...))

to allocate loop or collocation costs to Bell Atlantic's DSL revenue requirement would be expressly barred if the service were provided by a separate affiliate given the FCC's proposal in the Notice to prohibit a LEC from "discriminating in favor of its affiliate" *vis a vis* its DSL competitors in providing "any . . . services [or] facilities."<sup>3</sup>

Requiring LECs to provide DSL service through a separate affiliate would reduce other forms of discriminatory conduct too, given the FCC's proposal to prohibit a LEC from giving *any* form of preferential treatment to its affiliate. For example, the LEC would be prohibited from giving the affiliate preferential treatment in placing its DSL equipment in a central office since the affiliate would have to file the same collocation application that all other carriers must file, and the LEC would be barred from processing that application more quickly than an application by any other carrier. The LEC also would be prohibited from permitting the affiliate to collocate DSL equipment in a central office which the LEC claims to other carriers lacks physical collocation space. As yet

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2. (...continued)  
not into whether Bell Atlantic's failure to allocate any loop or collocation costs constitutes unlawful discrimination even though seven parties, including NAS, had petitioned the agency to reject or suspend the tariff for failure to allocate any loop or collocation costs to the DSL revenue requirement). *See* Petition of Network Access Solutions, Inc. to Reject for Suspend Tariff Transmittal No. 1076 (filed Sept. 8, 1998).
  3. *See* Notice at ¶ 96 (prohibiting a LEC, "in dealing with its advanced service affiliate," from discriminating "in favor of its affiliate in the provision of any goods services, facilities or information or in the establishment of standards"; requiring the affiliate to "interconnect with the . . . LEC pursuant to tariff or pursuant to an interconnection agreement"; and requiring the LEC to "make available to unaffiliated" carriers providing DSL service "whatever network elements, facilities, interfaces and systems are provided by the . . . LEC to the affiliate").

another example, the equal treatment requirement would prohibit the LEC from permitting its DSL affiliate to place DSL line cards in DLCs unless the LEC permits its DSL competitors to do so.

Requiring LECs to provide DSL service through a separate affiliate also would reduce (but not eliminate) the need for the many of the other regulatory reforms that NAS advocates below. For example, NAS advocates that the FCC strengthen its collocation policies in several ways, in part to deter anticompetitive conduct by LECs towards DSL competitors. Placing LECs on an equal footing with their DSL competitors through a separate affiliate requirement reduces the LECs' ability to discriminate against those competitors.

**B. The Commission Can Accomplish Its Objective by Requiring a LEC to Provide DSL Service Through an Affiliate of the LEC**

The Commission can further its objective to facilitate DSL competition by requiring LECs to provide DSL service through a separate affiliate as long as the agency makes clear, as proposed, that the LEC would be required to treat this affiliate in the same manner as it treats all other carriers providing DSL service. Requiring LECs to provide DSL service through a separate affiliate would facilitate DSL competition since it would bar a large variety of discriminatory practices that LECs would engage in if allowed to provide DSL service through their LEC as discussed above.

**C. Mandating that LECs Provide DSL Service Through an Affiliate Is Consistent Both with the FCC's Statutory Jurisdiction and with its Practice in Analogous Situations**

The FCC has jurisdiction to mandate that LECs provide DSL service through a separate affiliate as we show below. Moreover, the agency has exercised that jurisdiction in analogous situations as we also show below.

**1. The FCC has Jurisdiction to Require that LECs Provide DSL Service Through a Separate Affiliate**

The FCC has jurisdiction to require that LECs provide DSL service through a separate affiliate only if the service is interstate service. The DSL service that LECs provide plainly constitutes interstate service -- indeed interstate special access service -- as LECs already providing the service have recognized.<sup>4</sup> The LECs' DSL offerings constitute *special access service* because the offerings make available a dedicated (*i.e.*, non-switched) connection between an end user and the point of presence of an Internet service provider ("ISP") selected by that user so that the user can communicate with Internet host computers located in many other locations.<sup>5</sup> The service is *interstate*

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4. GTE Telephone Cos. Tariff FCC No.1, Transmittal No. 1148; BellSouth Tariff FCC No. 1, Transmittal No. 476; Pacific Bell Tel. Co. Tariff FCC No. 128, Transmittal No. 1986; and Bell Atlantic Telephone Cos., Tariff FCC No. 1, Transmittal No. 1076. (characterizing their DSL offerings as interstate service).

5. See MTS and WATS Market Structure, *Memo. Op. and Order*, 54 Rad. Reg. (P&F) 2d 615, 629-30 (1983) (defining special access service as an offering that provides an end user with a dedicated transmission path that both (1) connects locations specified by the end user within a local exchange area and (2) is used by the end user to transmit information to another exchange area).

service under well established FCC policy since more than 10 percent of the information transmitted on the LECs' DSL offerings will terminate in a different state than the one where it originates given that the Internet host computers with which a DSL user will communicate are dispersed widely throughout the country (indeed throughout the world).<sup>6</sup>

Affirming that the LECs' DSL offerings are jurisdictionally interstate would not prejudice the FCC's pending investigation into the question of whether a carrier is entitled to compensation when it terminates transmissions from an end user to that user's local ISP POP.<sup>7</sup> The issue under consideration there is whether a carrier providing that service is engaged in "local" transmission within the meaning of Section 251(b)(5) of the Act, whereas the issue here is whether the LECs' DSL offerings are "interstate" service. As a matter of law, a service can be both local for purposes of Section 251(b)(5) and jurisdictionally interstate.

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6. See MTS and WATS Market Structure, *Decision and Order*, 4 FCC Rcd 5660 (1990) (holding that special access service is interstate service if more than 10 percent of the information transmitted on the service originates and terminates in different states). The fact that the LECs' DSL service is used to access an interstate *information service* rather than an interstate *telecommunications service* is irrelevant to the question of whether their DSL offerings constitute interstate service. A service is jurisdictionally interstate if it is used to transmit information of *any* type to another state. See Investigation of Access and Divestiture Related Tariffs, 57 Rad. Reg. (P&F) 2d 188, 218-19 (1984). Nor are the LECs' DSL offerings jurisdictionally intrastate because of an FCC policy that exempts an ISP from the obligation to pay certain access charges applicable to switched access service to which the ISP may subscribe. In the first place, the FCC has exempted ISPs from the obligation to pay this access charge as a matter of *policy* rather than because the service is jurisdictionally intrastate. In any event, the LECs' DSL offerings are not the type of service to which the exemption applies.
  7. Public Notice, *Ex Parte Procedures Regarding Requests for Clarification of the Commission's Rules Regarding Reciprocal Compensation for Information Service Providers*, DA 98-1641 (Aug. 17, 1998)

**2. The FCC has Exercised its Jurisdiction to Require that LECs Provide Other Interstate Telecommunications Services Through an Affiliate in Order to Facilitate Competition in Those Other Markets**

Ordering LECs to provide DSL service through a separate affiliate not only is within the FCC's statutory jurisdiction, it also is consistent with telecommunications policy in analogous situations. For example, Congress has mandated that BOCs provide interLATA telecommunications service through a separate affiliate rather than through their LEC, and the FCC has imposed the same requirement on non-BOC LECs.<sup>8</sup> The FCC took this action because it found LECs could unfairly harm competition in the interLATA service market if they were to provide interLATA service through their LEC. For example, the agency found that a LEC would have a greater ability to place a price squeeze on its interLATA service competitors if it provided interLATA service through the LEC than through an affiliate since those competitors depend on LECs to provide them with access service, a necessary input into an interLATA service offering.<sup>9</sup> Carriers are even *more* dependent on LECs for inputs into their DSL offerings since those inputs (loops, collocation and OSS) constitute nearly 50 percent of the total cost of providing DSL service whereas the input that a carrier

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8. 47 U.S.C. § 272(a) (requiring BOCs to provide interLATA telecommunications service through a separate affiliate); Regulatory Treatment of LEC Provision of Interexchange Services Originating in the LEC's Local Exchange Area, *Second Report and Order*, 12 FCC Rcd. 15756 (1997) (requiring non-BOC LECs to provide interLATA telecommunications service through a separate affiliate). *See also* 47 U.S.C. § 274 (requiring BOCs to provide electronic publishing through a separate affiliate); 47 U.S.C. § 272(a) (requiring BOCs to engage in telecommunications manufacturing activities through a separate affiliate).

9. *Id.*, 12 FCC Rcd at 15848-50.

must get from LECs to provide interLATA service (access service) constitutes less than 30 percent of the total cost of providing interLATA service.

**II. The Commission's Collocation Policies Should be Strengthened in Several Ways**

A competitive DSL market requires not only that LECs provide DSL service through an affiliate that is treated by the LEC in the same manner as all other carriers providing DSL service, it also requires that the Commission adopt several new rules defining the manner in which LECs must treat DSL service providers. In this Part, we urge the agency to adopt rules which define in several specific ways the obligation of LECs to provide physical collocation.<sup>10</sup> In Part III, we urge the Commission to clarify LECs' loop provisioning and OSS responsibilities in various specific ways.

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10. The Commission should adopt the physical collocation policies that NAS proposes for provision of DSL service even if it does not do so for provision of telephone service since collocation expenses constitute a greater proportion of the cost to provide DSL service than to provide telephone service for two reasons. First, a carrier providing DSL service must collocate in more central offices than a carrier providing telephone service since DSL service for economic reasons must be provided broadly throughout a metropolitan area whereas telephony can be provided successfully solely to customers served by the most profitable central offices within a given metropolitan area. Carriers providing DSL service do not have the luxury of geographic cherry-picking within a given metropolitan area since most of them market their DSL service to Internet service providers ("ISPs") for resale to the ISP's end user customers; and ISPs are reluctant to market DSL service unless it is broadly available in a given metropolitan area. Second, carriers providing DSL service typically have less ability than carriers providing telephone service to spread the costs of collocation because the potential customer base for DSL service presently is substantially smaller than the customer base for telephony, and most carriers providing DSL service specialize in the provision of DSL service.

**A. The FCC Should Require that LECs Permit DSL Providers to Collocate Their Electronic Equipment in the Same Room Where LECs Place Their Own Electronic Equipment**

The first new physical collocation policy that the FCC should adopt is one requiring that LECs provide carriers with the ability to place their DSL equipment in the same room where LECs place their own electronic equipment ("common room physical collocation"). We show below that the benefits of mandating common room physical collocation exceed the costs.

**1. Permitting DSL Providers to Collocate Their Equipment in the Same Room Where LECs Place Their Own Electronic Equipment Will Provide Substantial Public Benefits**

The public will benefit from a rule that allows carriers to physically collocate their DSL equipment in the same room where the LEC places its own electronic equipment because this rule will greatly reduce the cost to provide DSL service. Reducing the cost to provide DSL service, in turn, will expand the market for DSL offerings by making DSL service affordable to far more people.

Common room physical collocation will substantially lower the cost of providing DSL service because it will eliminate the need to pay a huge non-recurring room construction charge -- a charge that averages \$57,000 for each central office in Bell Atlantic-South territory based on NAS's experience.<sup>11</sup> The room construction charge supposedly permits the LEC to recover its cost to design

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11. To date, NAS has applied to collocate its equipment in 17 Bell Atlantic central offices in two states and the District of Columbia. The total non-recurring room construction charge for these 17 collocation arrangements totals \$970,000, for an average cost per central office of \$57,000.

and construct the room where all physical collocators are placed. Costs recovered in this charge include the cost to design the physical collocation room and the cost to construct that room by, among other things, adding doors and partition walls. Material and construction costs for facilities placed inside the collocation room, such as the cage, typically are billed as separate non-recurring charges rather than being included in the room construction charge, but all of these other non-recurring charges combined are *much* smaller than the non-recurring room construction charge. Exhibit 1 illustrates this point by showing each non-recurring charge assessed by Bell Atlantic on a physical collocation arrangement in Virginia. This exhibit shows, based on NAS's experience, that the room construction charge for physically collocating in a typical Bell Atlantic-Virginia central office constitutes 84 percent of all non-recurring charges combined.

Common room physical collocation not only will make physical collocation arrangements more efficient economically, it will make collocation more efficient in other ways too. First, it will permit more efficient use of central office space by allowing DSL providers to physically collocate in numerous central offices where collocation space otherwise is either unavailable or is in short supply. Based on NAS's experience, Bell Atlantic claims that about 13 percent of its central offices lack space either to build a collocation room or to place an additional cage in the existing collocation room. But substantially all of these central offices have sufficient space to place a few additional racks in the room where Bell Atlantic places its own electronic equipment.

Common room physical collocation also will benefit the public because it will permit collocation arrangements to be provided in a more efficient amount of time. It typically takes at least

four months for a LEC to provide a physical collocation arrangement requiring new room or cage construction. Eliminating the need for such construction activities should make it possible for the LEC to provide a DSL service provider with collocation in no more than 60 days given that the amount of work required to provide this form of physical collocation would be no greater than the amount of work required to provide virtual collocation which LECs typically provide in about 60 days.

The fact that a DSL provider could subscribe to virtual collocation in order to obtain collocation more quickly and avoid the non-recurring room construction charge provides no basis for permitting LECs to deny applications for common room physical collocation since virtual collocation is a last resort for DSL providers because it inherently contains a huge cost not embodied in physical collocation arrangements. Whereas a physical collocator (including a common room physical collocator) is permitted to operate and maintain its collocated electronic equipment, a virtual collocator must cede control of this equipment to the LEC. Carriers that provide DSL service have no interest in ceding control of the electronic equipment they need in order to provide service.

**2. Costs Associated with Common Room Physical Collocation are Small**

Although many LECs have sought to avoid offering common room physical collocation on grounds that it would unnecessarily complicate their ability to provide security for their own equipment, the Commission notes correctly in the *Notice* that this concern is overstated.<sup>12</sup> The fact that LECs routinely contract with unaffiliated equipment installers to deploy equipment in the room

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12. *Notice* at ¶ 141.

where the LECs' own electronic equipment is placed evidences that security fears are overstated given that there is no rational reason to believe that an unaffiliated carrier's technicians are likely to pose a greater security threat than technicians of an unaffiliated equipment installer. Security concerns also are plainly overstated since the collocated DSL service provider would need access *only* to the discrete rack (or racks) in the room where its equipment is located rather than being given free rein to roam the room at will, as LECs sometimes disingenuously contend. Security risks likewise are exaggerated because the Commission could require all personnel with access to the electronics room to undergo training designed to minimize such risks. Similarly, LECs could grant access only to those with electronic passes, and they could install video equipment in order both to catch security breaches and to help determine who is responsible for any such breaches.

The fact that USWest already permits common room physical collocation provides additional evidence that security concerns have been overstated.<sup>13</sup> The USWest experience also illustrates the magnitude of the cost savings that can occur when common room physical collocation is available. One DSL provider that obtains common room physical collocation from USWest in Washington State has reported that its average non-recurring costs for a typical collocation arrangement there are less than \$10,000.<sup>14</sup> By contrast, NAS's average non-recurring costs for a

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13. See USWest Comments at 7 (CC Dkt. No. 98-78, filed June 18, 1998).

14. Comments and Proposal of Covad Communications Co. at 6, Case 98-C-0690 (N.Y. Pub. Service Comm., June 15, 1998).

physical collocation arrangement total \$57,000 as indicated above since it provides service in states where the LEC requires it to pay a room construction charge.<sup>15</sup>

**B. The Commission Should Regulate in Two Ways the Price that LECs Charge for Providing Collocation Arrangements for Provision of Interstate DSL Service**

Not only should the Commission require LECs to provide common room collocation, it also should regulate the price that LECs charge for collocation arrangements in two separate ways. Each is discussed below.

**1. LECs Should Be Required to Refund Part of a Risk Taking DSL Provider's Non-Recurring Physical Collocation Costs if the DSL Provider Converts to a Common Room Physical Collocation Arrangement Within 90 Days After Common Room Collocation Becomes Available**

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15. Although it would have only a minor beneficial impact, NAS does not object to adoption of the Commission's proposal to mandate that LECs permit a physical collocator choosing to place its equipment in a collocation room rather in the same room used by the LEC to (a) avoid placing its equipment in a cage or (b) lease fewer than 100 square-feet of space. *Notice* at ¶ 137. Adopting this proposal would be beneficial by slightly reducing the number of situations in which a LEC denies a carrier's request to physically collocate in a collocation room for lack of space since it would reduce the amount of occupied collocation space. Adopting the proposal also would lower the price of collocation by a small amount by reducing the recurring cost to lease space and the non-recurring cage construction cost. In New York, for example, where a collocator already can lease 25 square feet of space, monthly recurring costs are \$165 lower and cage construction costs are \$3,000 lower for a carrier choosing a 25-square foot caged collocation space than for a carrier selecting a 100-square foot caged collocation space. New York Tel. Tariff P.S.C. No. 914, Sec. 10.5.1 (issued Apr. 17, 1998) As discussed above, however, these small cost breaks pale in comparison to the gigantic cost reduction that would occur if the Commission permitted collocators to avoid the non-recurring room construction charge by mandating common room collocation.

The Commission first should require LECs to refund part of the non-recurring charge that a DSL provider pays for central office physical collocation space if the collocator vacates that space to take advantage of a newly adopted common room physical collocation arrangement. This mandatory refund should be available to any DSL provider requesting physical collocation in a state where common room physical collocation is not presently available, and the amount of the refund should decline in relation to the length of time that the carrier used the more expensive collocation option. In the unlikely event that a LEC has stranded investment as a result of this rule, it should be permitted to petition the relevant PUC to recover stranded costs, but it should not be allowed to file any such petition until at least 10 years after the date common room physical collocation becomes available in that state.

This rule would benefit the DSL market by reducing a significant barrier to entry that exists today. To enter the DSL market, a carrier today usually must pay a massive non-recurring charge for each central office in which the carrier physically collocates its equipment as discussed in Part II.A.1 above. Non-recurring collocation costs to provide DSL service in a single metropolitan area the size of Washington, DC easily can total more than \$4 million. The non-recurring collocation charge constitutes a more substantial entry barrier into the DSL market than in other telecommunications service markets for reasons discussed in note 10 above.

The rule also would help ensure that DSL pioneers are not placed at a serious and long term competitive disadvantage *vis-a-vis* those who delay entry into the DSL market until after common room physical collocation becomes available. Carriers have a substantial economic incentive to

delay entry into the DSL service market in states where common room collocation is not available given that several PUCs (and now the FCC) are presently considering proposals to mandate common room physical collocation. Without the proposed rule, those who have initiated DSL service despite the incentive to delay entry not only will receive no reward for their pioneering efforts to expedite the availability of DSL service, they actually will be unfairly penalized for these efforts.

The refund rule should be available only to carriers meeting two separate conditions. First, a carrier should be eligible for a refund only if common room collocation was not available at the time it submitted the application for physical collocation for which a refund is sought. This limitation is reasonable since the refund rule is intended to eliminate the competitive disadvantage that pioneering DSL providers face in the absence of the rule. Even if the carrier meets the first condition, it still should not qualify for a refund unless it requests common room physical collocation as a replacement for its existing collocation arrangement within 90 days after common room collocation becomes available. Requiring DSL providers to opt for less expensive common room collocation within this 90 day period should provide them with sufficient time to analyze their requirements and file the necessary collocation applications with the LECs, while sufficiently narrowing the window of eligibility to prevent abuse of the refund rule.

The refunded amount for a given collocation arrangement should be the total non-recurring charges for that arrangement, reduced by 1/360th of that amount for each month that has elapsed between the date that the collocation arrangement became available and the date that the carrier submitted an application to convert that arrangement to common room physical collocation. This

reduction in the refund amount reflects the benefit that the DSL provider has obtained under the initial collocation arrangement. It is based on a 30-year useful life for the room construction, conditioning, and cage construction that make up the non-recurring physical collocation charge. A 30-year useful life is reasonable for this type of property, and has been adopted by Bell Atlantic for similar purposes.<sup>16</sup>

While the benefit of the proposed rule is substantial, the burden on LECs is insignificant since they still will be able to recover the refunded amount from other sources. In most situations, LECs will be able to recover this amount from subsequent collocators. Demand for existing collocation space likely will be maintained even after regulators mandate that LECs offer common room physical collocation to DSL providers since demand for separate room collocation arrangements will continue to grow as the number of carriers providing other types of service increases. Moreover, a LEC would be able to recover a substantial part of the refunded amount even if no subsequent collocators occupy the abandoned space since that space is available for expansion of the LEC's own facilities, and since the LEC will be permitted to retain a portion of the non-recurring charge paid by the collocator to whom the refund is provided to reflect the time it occupied the space.

In the unlikely event that a LEC incurs stranded investment as a result of this rule, it should be permitted to petition the relevant state PUC for permission to recover those costs in an appropriate way. But the LEC should not be permitted to file this petition until a period of 10 years has elapsed

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16. See Bell Atlantic Tel. Cos. Tariff F.C.C. No. 1, Sec. 19.3(P) (refund of a portion of cage construction costs if a subsequent occupant can be found).