EX PARTE OR LATE FILED

BLUMENFELD & COHEN
SUMNER SQUARE
1615 M STREET, N.W. SUITE 700
WASHINGTON, D. C. 20036
202 955-6300
FACSIMILE 202 955-6460
http://www.technologylaw.com

4 EMBARCADERO CENTER
SUITE 1170
SAN FRANCISCO, CA 94111
415 394-7500
FACSIMILE 415 394-7505

January 4, 1999

VIA MESSENGER

Magalie Roman Salas, Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, DC 20554

RECEIVED
JAN - 4 1999
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Re: Notice of Ex Parte Communication regarding CC Docket 98-147

Dear Ms. Salas:

On Monday and Tuesday, December 21 and 22, 1998, executives and counsel for Rhythms NetConnections Inc., including Scott Chandler, Chief Financial Officer, Jeffrey Blumenfeld, Vice President and General Counsel, and Glenn B. Manishin and the undersigned, counsel, met with Chairman Kennard and Tom Powell, Commissioner Ness and Linda Kinney, Commissioner Furchgott-Roth and Paul Misener, Commissioner Powell and Kyle Dixon, and Paul Gallant, Legal Advisor to Commissioner Tristani.

The discussion of these meetings focused on issues relating to the Commission's Notice of Proposed Rulemaking in the above-captioned proceeding. The attached copy of DSL Access Telecommunications Alliance ("DATA") Notice of Ex Parte Communication with the Common Carrier Bureau provides an explicit summarization of the positions articulated to the Commissioners and their Legal Advisors during these meetings.

Sincerely,

Frank V. Paganelli

Enclosure

cc: Chairman Kennard
Commissioner Ness
Commissioner Furchgott-Roth
Commissioner Powell
Paul Gallant - Office of Commissioner Tristani

No. of Copies rec'd 0+1
List ABCDE

RECEIVED

JAN - 4 1999

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

BLUMENFELD & COHEN
SUMNER SQUARE
1615 M STREET, N.W. SUITE 700
WASHINGTON, D. C. 20036
202 955-6300
FACSIMILE 202 955-6460
http://www.technologylaw.com

4 EMBARCADERO CENTER
SUITE 1170
SAN FRANCISCO, CA 94111
415 394-7500
FACSIMILE 415 394-7505

December 1, 1998

VIA MESSENGER

Lawrence M. Strickling, Chief
Common Carrier Bureau
Federal Communications Commission
1919 M Street, N.W., Room 500
Washington, DC 20554

Re: CC Docket No. 98-147
Notice of Ex Parte Communication

Dear Mr. Strickling:

We are writing as counsel for the DSL Access Telecommunications Alliance ("DATA") to follow-up our recent meetings with the Common Carrier Bureau Staff on issues related to the Commission's NPRM in the captioned rulemaking proceeding. DATA consists of Rhythms NetConnections, Inc. ("Rhythms"), MachOne Communications, Inc. ("MachOne"), FirstWorld Communications, Inc. ("FirstWorld), and First Regional TeleCOM, LLC ("First Regional").

In this letter, DATA addresses three technical issues raised by certain incumbent local exchange carriers ("incumbent LECs" or "ILECs") to justify the withholding of CLEC access to the unbundled copper loops and physical collocation necessary to provision advanced services via DSL technologies. *First*, ILECs claim that shared access to a single loop by an ILEC's DSL competitor should be (or has been) prohibited by the Commission. This position rests on fundamentally incorrect legal and policy grounds. To the contrary, loop sharing has already been implemented by several ILECs for their own DSL services, and elementary principles of Communications Act jurisprudence — including the non-discrimination requirement of Section 251 of the Act — make clear that comparable opportunities to offer DSL data services via a loop shared with existing ILEC voice services is both technically feasible and legally required.

Second, ILECs have denied access to copper loops on the grounds that DSL technologies may cause spectral interference with other nearby loops. In fact, however, it is the incumbent LECs' loop technologies that interfere most with other loops, not the newer DSL technologies. DATA urges the Commission to establish and participate in a competitively neutral standards

setting process to ensure that "spectrum compatibility" issues are not used anticompetitively to block loop access, and in the interim, to issue a rule allowing any DSL loop combination not expressly shown to be harmful to the network.

Third, ILECs claim that technical conflicts arising from the placement of digital loop carrier ("DLC") facilities in the network justify ILEC denial of DSL-capable loops from a customer premises to the central office. In reality, however, several technically feasible solutions to the DLC/DSL issue exist, including the relatively available supply of alternative copper facilities onto which DSL-based loops can be "rearranged" for little or no cost to the ILEC. In addition, several alternative collocation solutions are available, and should be found to be both technically feasible and required of ILECs where requested by a DSL-based CLEC.

I. SHARED OR SINGLE LOOP ISSUES

ILECs claim that, for technical and policy reasons, they should not be required to permit customers to keep their ILEC voice service while purchasing DSL service over that same loop from a competing DSL provider. ILECs do, however, permit customers to keep their ILEC voice service while purchasing DSL service over the same loop from the ILEC. The ILECs have coined the pejorative term "spectrum unbundling" to refer to the provision of both voice and DSL services over the same loop when the ILEC provides the voice service and a competing company provides the DSL service.

Because the ILECs routinely deny competitors the option of offering DSL-based data services over the same line that the ILEC provides voice services, DSL-based data service providers are currently left with two unacceptable options, both of which anticompetitively raise the competitors' cost of entry:

First, DSL providers can choose to acquire only customers willing to change voice providers when they purchase DSL services. There is, of course, no logical relationship between a consumer's desire to obtain DSL service and a consumer's interest in changing voice provides. Thus, this option penalizes those consumers who are perfectly happy with their existing voice provider, CLEC or ILEC, but are interested in higher-speed data services from someone other than their ILEC. It requires all potential DSL-based data providers to also become voice CLECs, and enter that market for voice services, as well as the market for data services in which they actually desire to compete. The imposition by the incumbent of a requirement that a competitor enter two markets in order to compete with the incumbent in a single market is a well-recognized barrier to entry that is sure to slow, if not eliminate, competition in the advanced services market.[1]

Second, DSL-based data providers can require potential customers to purchase a second line for DSL-only services. However, because the recurring loop cost in most cases is approximately half the total cost of providing DSL services, a second line means that

[1] *See, generally,* Horizontal Merger Guidelines Department of Justice and Federal Trade Commission, § 3.0 (April 2, 1992).

competitive DSL providers must recover significant costs that the ILECs do not have to carry. The ILECs, providing both voice and data over a single line, therefore calculate the loops cost for their DSL service at $0, while the CLEC competitors pay as much as $40. Obviously, this makes it impossible for a data CLEC employing two lines to compete with ILECs on price, particularly for the residential consumer market. The ILECs complete this price squeeze by arguing that the DSL CLECs show "no interest" in serving the consumer market.

There is no technical, legal, regulatory or policy justification for the Commission to permit the ILECs to continue their anticompetitve refusal to allow their DSL competitors the same right their own DSL divisions have of providing DSL service over the same loop as the ILECs' voice service. The customers have the right to use their service in the way the customer chooses, including purchasing voice service from the ILEC and DSL service from a competitor. Line sharing is technically feasible and the Commission has the authority to require it, both under the 1996 Act as well as a long line of authority predating the Act. Moreover, failure by the Commission to respond to the ILECs "spectrum unbundling" policies will virtually eliminate the ability of new DSL entrants to quickly enter the market and price their services competitively.

(1) There Are No Technical or Operational Obstacles to Sharing A Single Loop between Two Service Providers

ILECs have opposed line-sharing with DSL-based providers on the frivolous grounds that simultaneous provision of data and voice service over a single line by separate providers would "harm the network" in various ways. These claims, however, fly in the face of the facts: the ILECs "unbundle" the spectrum for their own data business units on a regular basis, and in some cases, to separate service providers.

The argument that most obviously refutes ILEC claims of technical infeasibilty is that incumbents currently provide successful line sharing services to themselves and their subsidiaries. Several ILEC Internet divisions currently offer their high-speed DSL data services only over the same line as their parent entities' POTS services.[2] The incumbents' DSL customers must also be voice customers in order to receive the DSL services, and the DSL services are available *only* as an "overlay" to existing voice service on the same loop. This is accomplished by the ILEC for itself by separating the voice and data signals in the central office, and directing the voice data signals to the voice switch in the CO at which the loop would normally terminate, while directing the DSL signals to the ILEC's ATM switch, located wherever the ILEC DSL

---

[2] Direct Case of GTE, *In the Matter of GTE Telephone Operating Companies GTOC Tariff FCC No. 1, GTOC Transmittal No. 1148*, CC Docket No. 98-79 (September 8, 1998) at 6 ("The DSL Service offering enables the simultaneous transmission of voice dialed calls and high speed data traffic over a single transmission path."); GTE System Telephone Companies Tariff FCC No. 1, Transmittal No. 260 (filed August 28, 1998) at §18.7(B); Direct Case of Pacific Bell, *In the Matter of Pacific Bell Company Pacific Bell Tariff FCC No. 128 Pacific Bell Transmittal No. 1986*, CC Docket No. 98-103 (September 11, 1998) at 1 ("Pacific's ADSL service is a modem-based technology that adds high-speed data capability over traditional local exchange service."); Bell South Telecommunications, Inc. Tariff FCC No. 1 (filed September 2, 1998) at §7.2.17(A) ("The design, maintenance, and operation of Bell South ADSL service contemplates end-to-end communications originating and terminating as an overlay service using an in-service Telephone Company-provided, compatible end-user premises exchange line facility.").

business unit has located it (frequently not in the same CO). This demonstrates conclusively that line sharing is technically feasible. If the ILECs can share single line spectrum between their voice and data subsidiaries, their voice units can share spectrum with independent data providers. Any difference between the two is simply a matter of operational management and coordination rather than technical feasibility.

There is thus no question that single-line service is technically feasible. In fact, DSL-provider MachOne reports that it has successfully conducted field tests for line sharing of its DSL-based data services with the voice services of independent incumbent LEC Citizens Communications.[3] To the extent that virtually all incumbent LECs can and do provide voice/data line sharing to themselves, and certain ILECs, such as Pacific Bell and Citizens Communications, share a single line with independent service providers, than it is clear that there exists no bona fide issue of technical infeasibility.[4]

The present ILEC arguments relate solely to *operational* feasibility, in essence maintaining that it would be confusing for customers to received two different services over the same loop facility from two different carriers. These argument again are belied by the facts. First, Pacific Bell today offers line sharing to an independent Internet Service Provider ("ISP"), Concentric Network, Inc, which describes its DSL service as follows: [5]

> Installation prices include the following: DSL modem, and if using PacBell and an *existing phone line,* a splitter. . . If PacBell is the LEC, the standard phone service charge for the phone line used as the DSL circuit is not included. However, *an existing phone line may be used, and a splitter will be installed to enable your existing phone line to carry both your data and voice traffic.* Our other DSL LECs require a new phone line be installed and the phone service fee is included.

---

[3] MachOne Reply Comments at Exhibit B.

[4] In other forums, ILECs have specifically claimed that loop sharing or spectrum unbundling would disturb the network because data providers' equipment would create false seizures of ILEC trunks, causing central office switch damage, and would tend to prevent the ILEC from conducting mechanized loop testing. Neither claim is accurate, nor have the ILECs explained why a competitor's DSL equipment is likely to cause these network problems, but the ILEC's nearly identical equipment packages, performing the same functions, would not. As at least one DSL provider has already demonstrated, a DSL network can and has been constructed (and tested) to avoid any supposed problems of false trunk seizures and mechanized loop test blockage. There us no question that single-line service is technically feasible. Arbitration Brief of PDO Communications, Inc., *In the Matter of Petition of PDO Communications, Inc. for Arbitration Pursuant to Section 252 of the Federal Telecommunications Act of 1996 to Establish an Interconnection Agreement with Pacific Bell,* before the Public Utilities Commission of California, A.98-06-052 (October 5, 1998)("PDO Arbitration Brief") at 52-53. In fact, DSL-provider MachOne reports that it has successfully conducted field tests for line sharing of its DSL-based data services with the voice services of independent incumbent LEC Citizens Communications. MachOne Reply Comments at Exhibit B. In fact, Pacific Bell has admitted that there is little likelihood of switch damage from line sharing. PDO Arbitration Brief at 54. Likewise, modern DSL equipment is readily capable of facilitating mechanized loop testing. MachOne has demonstrated DSL network architecture that can react to an ILEC's test signal in less than 3 milliseconds, well within the parameters for successful line testing. *Id. at 52.*

[5] MachOne Reply Comments at 7 n.13. *See* Concentric Network Inc. Web page <http://www.concentric.net/productsservices/dedicated_access/dsl_access/index.html> (emphasis added).

business unit has located it (frequently not in the same CO). This demonstrates conclusively that line sharing is technically feasible. If the ILECs can share single line spectrum between their voice and data subsidiaries, their voice units can share spectrum with independent data providers. Any difference between the two is simply a matter of operational management and coordination rather than technical feasibility.

There is thus no question that single-line service is technically feasible. In fact, DSL-provider MachOne reports that it has successfully conducted field tests for line sharing of its DSL-based data services with the voice services of independent incumbent LEC Citizens Communications.[3] To the extent that virtually all incumbent LECs can and do provide voice/data line sharing to themselves, and certain ILECs, such as Pacific Bell and Citizens Communications, share a single line with independent service providers, than it is clear that there exists no bona fide issue of technical infeasibility.[4]

The present ILEC arguments relate solely to *operational* feasibility, in essence maintaining that it would be confusing for customers to received two different services over the same loop facility from two different carriers. These argument again are belied by the facts. First, Pacific Bell today offers line sharing to an independent Internet Service Provider ("ISP"), Concentric Network, Inc, which describes its DSL service as follows: [5]

> Installation prices include the following: DSL modem, and if using PacBell and an *existing phone line,* a splitter. . . If PacBell is the LEC, the standard phone service charge for the phone line used as the DSL circuit is not included. However, *an existing phone line may be used, and a splitter will be installed to enable your existing phone line to carry both your data and voice traffic.* Our other DSL LECs require a new phone line be installed and the phone service fee is included.

---

[3] MachOne Reply Comments at Exhibit B.

[4] In other forums, ILECs have specifically claimed that loop sharing or spectrum unbundling would disturb the network because data providers' equipment would create false seizures of ILEC trunks, causing central office switch damage, and would tend to prevent the ILEC from conducting mechanized loop testing. Neither claim is accurate, nor have the ILECs explained why a competitor's DSL equipment is likely to cause these network problems, but the ILEC's nearly identical equipment packages, performing the same functions, would not. As at least one DSL provider has already demonstrated, a DSL network can and has been constructed (and tested) to avoid any supposed problems of false trunk seizures and mechanized loop test blockage. There us no question that single-line service is technically feasible. Arbitration Brief of PDO Communications, Inc., *In the Matter of Petition of PDO Communications, Inc. for Arbitration Pursuant to Section 252 of the Federal Telecommunications Act of 1996 to Establish an Interconnection Agreement with Pacific Bell,* before the Public Utilities Commission of California, A.98-06-052 (October 5, 1998)("PDO Arbitration Brief") at 52-53. In fact, DSL-provider MachOne reports that it has successfully conducted field tests for line sharing of its DSL-based data services with the voice services of independent incumbent LEC Citizens Communications. MachOne Reply Comments at Exhibit B. In fact, Pacific Bell has admitted that there is little likelihood of switch damage from line sharing. PDO Arbitration Brief at 54. Likewise, modern DSL equipment is readily capable of facilitating mechanized loop testing. MachOne has demonstrated DSL network architecture that can react to an ILEC's test signal in less than 3 milliseconds, well within the parameters for successful line testing. *Id. at 52.*

[5] MachOne Reply Comments at 7 n.13. *See* Concentric Network Inc. Web page <http://www.concentric.net/productsservices/dedicated_access/dsl_access/index.html> (emphasis added).

Operationally, there is no analytic difference between Pacific Bell's retail offering to Concentric of DSL services for Internet conductivity over a shared loop and Pacific Bell allowing a DSL provider to order the data functionality of a loop. In both cases, consumers will receive two separate services from two separate providers (at least in terms of operational responsibility) over one copper loop. Physically, what happens in the Concentric case is that the ILEC owns and maintains the DSL equipment at the customer premises and in the central office (or wherever the DSL line terminates), and splits the data signals off at the line termination for Concentric. In the DSL-provider case, the equipment employed would be virtually identical, but would be owned and maintained by the data provider. Once again, the data and voice signals would run together along the copper loop until they reached the termination of the DSL loop (in the central office or DLC remote terminal) where the voice signal would be directed to the ILEC's switch, and the data signal would be transported to the data provider's POP. In either scenario, where the consumer has difficulty with one or the other service, the consumer will call one or both providers until a determination is made regarding the source of the problem.

The fact that the consumer would have to deal with two providers for two services is no different in the case of a "single line" combination of DSL and voice services than it is in the case of a "single line" combination of local voice and long distance voice services. Similarly, it is no different than in the case of a "single line" combination of intrastate and interstate WATS services, as is true since the Commission's actions to permit Unified WATS Access Lines (UWALs).

In sum, there is no technical or operational feasibility barrier to sharing a single copper loop between any two voice and data providers. On the contrary, the ILECs are already providing this service to themselves, thus creating a competitive disadvantage for those attempting to enter the market of advanced services without the benefit of incumbent control of the copper plant.

(2) The Commission Has Clear Authority Under the 1996 Act and Pre-Act Precedent to Require Line Sharing

The incumbent LEC arguments that the Commission cannot compel line sharing — and that the Commission's 1996 *Local Competition Order* has already precluded single line access to DSL competitors — are meritless for several reasons. These include:

- Settled law providing that an end user's use of telephone facilities in ways that are not publicly detrimental may not be prohibited;
- Section 251's requirement of non-discrimination between the network elements and functionalities utilized by an ILEC for its own services and those made available to competitors;

- The ILEC's strained interpretation of one paragraph of the *Local Competition Order*, which is inconsistent with the text, purpose and technical concerns voice by the Commission;

- The Commission's ample power, under the Act's express definitions, to find that the "functionality" of loop sharing is a network element that must be offered on an unbundled basis by ILECs, and;

- The plain power of states, under the *Local Competition Order*, to add new unbundled network elements ("UNEs") that meet the 1996 Act's standards.

(a) Pre-1996 Act Authority

Over four decades ago the Commission and the courts determined that an incumbent telephone monopolist cannot interfere with "the telephone subscriber's right reasonably to use his telephone in ways which are privately beneficial without being publicly detrimental."[6] This common-sense limitation on the ability of incumbents to artificially delay competition can be applied just as readily today with regard to line-sharing as did in 1956 when the Court of Appeals applied it to the Hush-A-Phone. A consumer's decision to contract with one provider for voice services, and another provider for data services over the same loop, cannot be interfered with by the incumbent unless the incumbent has demonstrated that such a request would be harmful to the public network. As discussed above, no ILEC has made that showing to date.

The Court of Appeals expressly recognized the authority of the Commission to rule on this issue:

> Prescribing what changes should be made in the [incumbent's] tariffs to render them 'just, fair, and reasonable' and determining what orders may be required to prohibit violation of subscribers' rights thereunder *are functions entrusted to the Commission.*[7]

The policy conclusion of the Commission in the wake of this decision was that incumbents cannot presume that a technology alternative causes network harm, but rather must clearly demonstrate real harm to the network before they could block customer choice. The Commission found that an ILEC's "tariff regulation which amounts to a blanket prohibition upon the customer's use of any and all devices *without discriminating between the harmful and*

---

[6] *Hush-A-Phone Corp. v. U.S.*, 238 F.2d 266, 269 (D.C. Cir. 1956).

[7] *Id.* Indeed, because the Court of Appeals was reversing a Commission decision upholding the telephone company tariffs that outlawed the Hush-A-Phone device, the Court actually ruled that, while the Commission clearly had authority over the tariffs in question, the Commission could not exercise that authority to permit the telephone company to prohibit, *a priori*, the customer from using its service in a privately beneficial way with no showing of public harm.

harmless encroaches upon the right of the user to make reasonable use of the facilities furnished by the [ILECs]."[8]

The Commission extended this theory to its modern position a decade later in its *Carterphone v. AT&T* dockets, when it found that AT&T's tariff was unlawful "because it prohibited the use of the Carterphone and other interconnecting devices without regard to *actual* harm caused to the telephone system." [9] The Commission further stated that, "a tariff is unreasonable if it assumes *a priori* . . . the question of technical harm."[10]

Thus, under its own precedent, upheld in the courts, the Commission may not allow the incumbent LECs to prevent customers from their preferred use of service and choice of service providers on the mere assertion or presumption—and in the absence of conclusive proof—that line sharing creates network harm that is harmful to the public. Rather, the ILECs must show actual public harm to the network before blocking a consumer choice that is otherwise privately beneficial.

(b) The Telecommunications Act of 1996

The basic non-discrimination principles codified in Section 251 of the Act lead to the same conclusion. The Act requires that ILECs provide their competitors "nondiscriminatory access to network elements on an unbundled basis at any technically feasible point on rates, terms and conditions that are just, reasonable and nondiscriminatory."[11] The Commission has since held that " the term 'nondiscriminatory,' as used throughout section 251, applies to the terms and conditions an incumbent LEC imposes on third parties *as well as on itself*."[12] Because incumbent LECs currently provide themselves access to single-line data and voice services, the nondiscriminatory language of section 251 demands that they do the same for third party DSL providers. The Commission's definition of "nondiscriminatory" does not merely require that ILECs treat all third party carriers equally, but that they treat third party carriers equally to the way they treat themselves. Line sharing is a classic example of the incumbents raising a network harm "red herring" in order to game the system and to create a competitive advantage for themselves. The Act's nondiscrimination mandate requires, at least, that the ILECs allow their competitors to use the network in the same way the ILECs use the network for their own retail services.

The ILECs point to paragraph 385 of the Commission's Local Competition Order in support of their claim that they need not provide access to the data functionality of the loop. However, the Commission's order, released just two years ago, is already outdated in one

---

[8] *Hush-A-Phone c. AT&T*, Decision and Order on Remand, 22 F.C.C. 112, 113 (1957) ("*Hush-A-Phone Remand*").

[9] *Carterphone v. AT&T*, Dockets 16942, 17073, Memorandum Opinion and Order, 14 F.C.C. 2d 571, 572 (1968) ("Carterphone") (emphasis added).

[10] *Id.* at 573.

[11] 47 U.S.C. §251(c)(3).

[12] First Report and Order, *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket No. 96-98 (rel. August 8, 1996) ("*First R&O*") ¶ 218 (emphasis added).

important way. In the paragraph most relied upon by the ILECs in support of their "spectrum unbundling" claims, the Commission makes statements of fact that are no longer accurate. In particular, the Commission incorrectly states that:

> a definition of a loop element that allows simultaneous access to the loop facility would preclude the provision of certain services in favor of others. For example, carriers wishing to provide solely voice-grade service over a loop would preclude another carrier's provision of a digital service, such as ISDN, or ADS, over that same loop.[13]

In footnote 833, the Commission adds, "[d]igital services such as ISDN and ADSL occupy the same frequency spectrum on a loop as ordinary voice-grade services."[14]

But that is not the case. The ADSL technologies used by most competitive DSL providers, including Rhythms and MachOne, *do not* occupy the same frequency spectrum as ordinary voice-grade services. Accordingly, there is no technical reason to fear that permitting shared use of loops will doom voice CLECs to "second class status" by prohibiting their offering of services on a loop shared with a DSL competitor, or vice-versa. Thus, because the ambiguity of Paragraph 385 — as recently applied by the California PUC In the first state commission arbitration on this issue — has led to the misperception that the Commission has for some reason precluded line sharing, the Commission should take the opportunity to clarify the record and remove any lingering uncertainty on this score.

Aside from the nondiscrimination language of section 251, the Commission also has the authority to require the unbundling of the data functionality of the loop as a "new" separate network element. In the First Report and Order, the Commission set aside for itself the right to "identify additional, or perhaps different, unbundling requirements that would apply to incumbent LECs in the future."[15] As part of its duty under section 706 of the Act to "encourage the deployment of on a reasonable and timely basis of advanced telecommunications capability to all Americans,"[16] as well the important public interest in vibrant competition in *all* telecommunications services, the Commission should declare the data functionality of a local loop to be a separate network element that must be unbundled according to the requirements of section 251 of the Act.

Even if the Commission determines that the data functionality of the loops is not a separate network element to be unbundled, the Commission should nevertheless reaffirm its position that the existing list of UNEs is merely a minimal list, and that "states may impose additional unbundling requirements pursuant to section 252(e)(3), as long as such requirements are consistent with the 1996 Act and our regulations."[17] The Commission should re-state that

---

[13] *First R&O* ¶ 385.
[14] *Id.* n. 833.
[15] *First, R&O* ¶ 246.
[16] 47 U.S.C. §706(a).
[17] *First R&O* ¶ 244.

important way. In the paragraph most relied upon by the ILECs in support of their "spectrum unbundling" claims, the Commission makes statements of fact that are no longer accurate. In particular, the Commission incorrectly states that:

> a definition of a loop element that allows simultaneous access to the loop facility would preclude the provision of certain services in favor of others. For example, carriers wishing to provide solely voice-grade service over a loop would preclude another carrier's provision of a digital service, such as ISDN, or ADS, over that same loop.[13]

In footnote 833, the Commission adds, "[d]igital services such as ISDN and ADSL occupy the same frequency spectrum on a loop as ordinary voice-grade services."[14]

But that is not the case. The ADSL technologies used by most competitive DSL providers, including Rhythms and MachOne, *do not* occupy the same frequency spectrum as ordinary voice-grade services. Accordingly, there is no technical reason to fear that permitting shared use of loops will doom voice CLECs to "second class status" by prohibiting their offering of services on a loop shared with a DSL competitor, or vice-versa. Thus, because the ambiguity of Paragraph 385 — as recently applied by the California PUC In the first state commission arbitration on this issue — has led to the misperception that the Commission has for some reason precluded line sharing, the Commission should take the opportunity to clarify the record and remove any lingering uncertainty on this score.

Aside from the nondiscrimination language of section 251, the Commission also has the authority to require the unbundling of the data functionality of the loop as a "new" separate network element. In the First Report and Order, the Commission set aside for itself the right to "identify additional, or perhaps different, unbundling requirements that would apply to incumbent LECs in the future."[15] As part of its duty under section 706 of the Act to "encourage the deployment of on a reasonable and timely basis of advanced telecommunications capability to all Americans,"[16] as well the important public interest in vibrant competition in *all* telecommunications services, the Commission should declare the data functionality of a local loop to be a separate network element that must be unbundled according to the requirements of section 251 of the Act.

Even if the Commission determines that the data functionality of the loops is not a separate network element to be unbundled, the Commission should nevertheless reaffirm its position that the existing list of UNEs is merely a minimal list, and that "states may impose additional unbundling requirements pursuant to section 252(e)(3), as long as such requirements are consistent with the 1996 Act and our regulations."[17] The Commission should re-state that

---

[13] *First R&O* ¶ 385.
[14] *Id.* n. 833.
[15] *First, R&O* ¶ 246.
[16] 47 U.S.C. §706(a).
[17] *First R&O* ¶ 244.

individual state commissions remain free to impose additional unbundling requirements on ILECs above and beyond any decisions made by the Commission, because an exhaustive federal list "would not necessarily accommodate changes in technology, and it would not provide states the flexibility they need to deal with local conditions."[18]

II. SPECTRUM COMPATIBILITY

The incumbent LECs currently deny DSL providers access to loop binder groups based on claims that DSL technologies may cause spectral interference with other loops in the same group. In reality, however, the worst interfering loops are the T-1 and ISDN lines regularly deployed by the ILECs. In fact, no ILEC has demonstrated that DSL-based technologies (CAP, DMT) negatively interfere with other lines in a binder group. Rather, DSL technologies are far more impacted by the ILECs' T-1 and ISDN lines than vice versa.

The incumbent LECs' use of so-called "spectrum management" policies to "protect" the network is nothing more than a re-hashing of the decades old predictions made by telephone monopolists that competitive new technologies will harm the network and therefore are justifiably disallowed. Just as the Commission and the courts have historically rejected any presumption by incumbents that new technologies cause network harm,[19] the Commission should do the same here.

Specifically, the Commission should not allow competition to be held-up by the unilateral spectrum management policies of individual ILECs, but rather should mandate a competitively neutral spectrum management standard-setting process to investigate the actual level of interference between technologies. That process should include the active participation of the ILECs, CLECs, equipment suppliers, *and* the Commission. The process must be competitively neutral in both structure and procedure. Representation must be equitably spread over all segments of the industry. Representatives must have equal authority, with no party or groups of parties presuming to have greater weight or "veto" power. The Commission must be vigilant that no party, particularly incumbent LECs, be allowed to employ existing buying power to "game" the standards-setting process in favor of a particular outcome.

Interim Rule

Until a standards setting body can be organized and perform its duties, the Commission should find in the interim that (1) no incumbent LEC has shown that the DSL technologies used by competitors, namely CAP and DMT, or 2B1Q, are harmful to the network or interfere at any significant level with other lines in a binder group; (2) pending such a determination, incumbent LECs cannot, under the precedent set by the Commission and the courts in Hush-a-phone, presume that network harm exists; and (3) unless and until an ILEC demonstrates that DSL technologies cause actual network harm, they are prohibited from denying competitors access to binder groups based upon spectrum interference claims.

---

[18] *Id.* ¶ 243.

[19] *Hush-A-Phone*, 238 F.2d at 269;*Hush-A-Phone Remand* at 113;*Carterphone*, 14 F.C.C. 2d at 572.

individual state commissions remain free to impose additional unbundling requirements on ILECs above and beyond any decisions made by the Commission, because an exhaustive federal list "would not necessarily accommodate changes in technology, and it would not provide states the flexibility they need to deal with local conditions."[18]

II. SPECTRUM COMPATIBILITY

The incumbent LECs currently deny DSL providers access to loop binder groups based on claims that DSL technologies may cause spectral interference with other loops in the same group. In reality, however, the worst interfering loops are the T-1 and ISDN lines regularly deployed by the ILECs. In fact, no ILEC has demonstrated that DSL-based technologies (CAP, DMT) negatively interfere with other lines in a binder group. Rather, DSL technologies are far more impacted by the ILECs' T-1 and ISDN lines than vice versa.

The incumbent LECs' use of so-called "spectrum management" policies to "protect" the network is nothing more than a re-hashing of the decades old predictions made by telephone monopolists that competitive new technologies will harm the network and therefore are justifiably disallowed. Just as the Commission and the courts have historically rejected any presumption by incumbents that new technologies cause network harm,[19] the Commission should do the same here.

Specifically, the Commission should not allow competition to be held-up by the unilateral spectrum management policies of individual ILECs, but rather should mandate a competitively neutral spectrum management standard-setting process to investigate the actual level of interference between technologies. That process should include the active participation of the ILECs, CLECs, equipment suppliers, *and* the Commission. The process must be competitively neutral in both structure and procedure. Representation must be equitably spread over all segments of the industry. Representatives must have equal authority, with no party or groups of parties presuming to have greater weight or "veto" power. The Commission must be vigilant that no party, particularly incumbent LECs, be allowed to employ existing buying power to "game" the standards-setting process in favor of a particular outcome.

Interim Rule

Until a standards setting body can be organized and perform its duties, the Commission should find in the interim that (1) no incumbent LEC has shown that the DSL technologies used by competitors, namely CAP and DMT, or 2B1Q, are harmful to the network or interfere at any significant level with other lines in a binder group; (2) pending such a determination, incumbent LECs cannot, under the precedent set by the Commission and the courts in Hush-a-phone, presume that network harm exists; and (3) unless and until an ILEC demonstrates that DSL technologies cause actual network harm, they are prohibited from denying competitors access to binder groups based upon spectrum interference claims.

---

[18] *Id.* ¶ 243.

[19] *Hush-A-Phone*, 238 F.2d at 269;*Hush-A-Phone Remand* at 113;*Carterphone*, 14 F.C.C. 2d at 572.

III. DLC VAULTS

ILECs employ Digital Loop Carrier ("DLC") vaults in the field to merge copper lines onto high-speed transport. Where a loop carrier involves non-copper carriage from the vault to the ILEC's central office ("CO"), the ILECs claim that DSL access is not available. The ILECs further argue that any requirement that they allow data CLECs to place equipment in or near the DLC vault to solve this problem constitutes "subloop unbundling," a step not currently required under the Commission's rules.

The ILEC positions, however, mischaracterize the facts and ignore several technically feasible solutions to the DLC vault or remote terminal situation. Moreover, the issue is really one of collocation, which is clearly required, rather than of subloop unbundling.

First, ILECs must be required to provide access to *any* alternate copper lines available from a DLC vault to the CO. In most cases, a loop plant with DLC continues to have copper plant capacity back to the CO, and ILECs routinely rearrange customers from and to copper lines as needed. For instance, pay phones and ISDN lines require copper lines. Where copper lines are not immediately available, ILECs routinely rearrange customers not dependent on copper from their copper lines to accommodate those that are. This process is so routine that the cost of rearrangement is built into the cost of the loop, and therefore into the UNE prices for loop set under states' Section 251/252 hearings over the past several years. Similarly, incumbents should be required to rearrange copper dependant DSL lines at the DLC vault to allow the DSL lines to terminate in the central office.

The Commission should also find that where copper rearrangement is not available, competitors have the right to collocate at the termination of the copper line. Because the copper DSL line "terminates" at the DLC remote terminal, DSL providers must be allowed to collocate their equipment at or near the vault, or wherever technically feasible. Among the various alternative collocation options that the Commission should find to be technically feasible are (*see* attached illustrations):

- Collocation in the vault/remote terminal. Where space is available, CLECs should be allowed to collocate their DSLAMs in the ILEC's DLC remote terminal.

- "Adjacent" collocation. CLECs should be allowed to cross-connect at the DLC vault and run copper to a nearby location where the CLECs' DSL termination equipment can be collocated.

- "Parallel Vault" collocation. CLECs should be allowed to construct or order the construction of a parallel vault near the DLC vault. The incoming DSL lines would be cross-connected at the ILEC's vault with a copper facility run to the CLEC's parallel vault, where DSL termination equipment can be collocated. The DSLAM-translated signals could then be brought back to the ILEC vault for transport to the CO, or dedicated transport would connect the parallel vault to the CLEC's POP.

- "U-Turn" collocation. CLECs can place DSL termination equipment in a customer premise or any other building within the service area of the DLC vault. By definition, the buildings served by the DLC vaults are all connected by copper loops to that vault. Within the vault, the CLEC can obtain a cross-connection between the loop to the DSLAM and the loop to the customer, thereby obtaining copper connectivity between the customer and the DSLAM. The CLEC thus has copper connectivity sufficient for DSL from the customer to another building within the DLC service area, which can serve as a remote collocation facility from which the CLEC can run dedicated transport to its POP.

The Commission should find that the ILECs cannot deny DSL-based providers any technically feasible solution to the technical barriers raised by the build-out of DLC vaults. The Commission should further identify the above as examples of technically feasible solutions that a CLEC may request in order to provision DSL-based data services.

In sum, DSL technology provides the potential to revolutionize the provision of high-speed data services, create a burgeoning competitive market, and extend local competition to some market segments, especially residential subscribers, where competition is long overdue. The shared loop access, spectrum compatibility and DLC alternatives presented here are technically feasible methods of interconnection permitted by the Act and the Commission's existing rules. The Commission should clarify through section 706 proceedings that none of these issues, as presented by the ILECs, justify the anticompetitive denial of access by DSL-based CLECs to the loops and collocation necessary for the provisioning of advanced services.

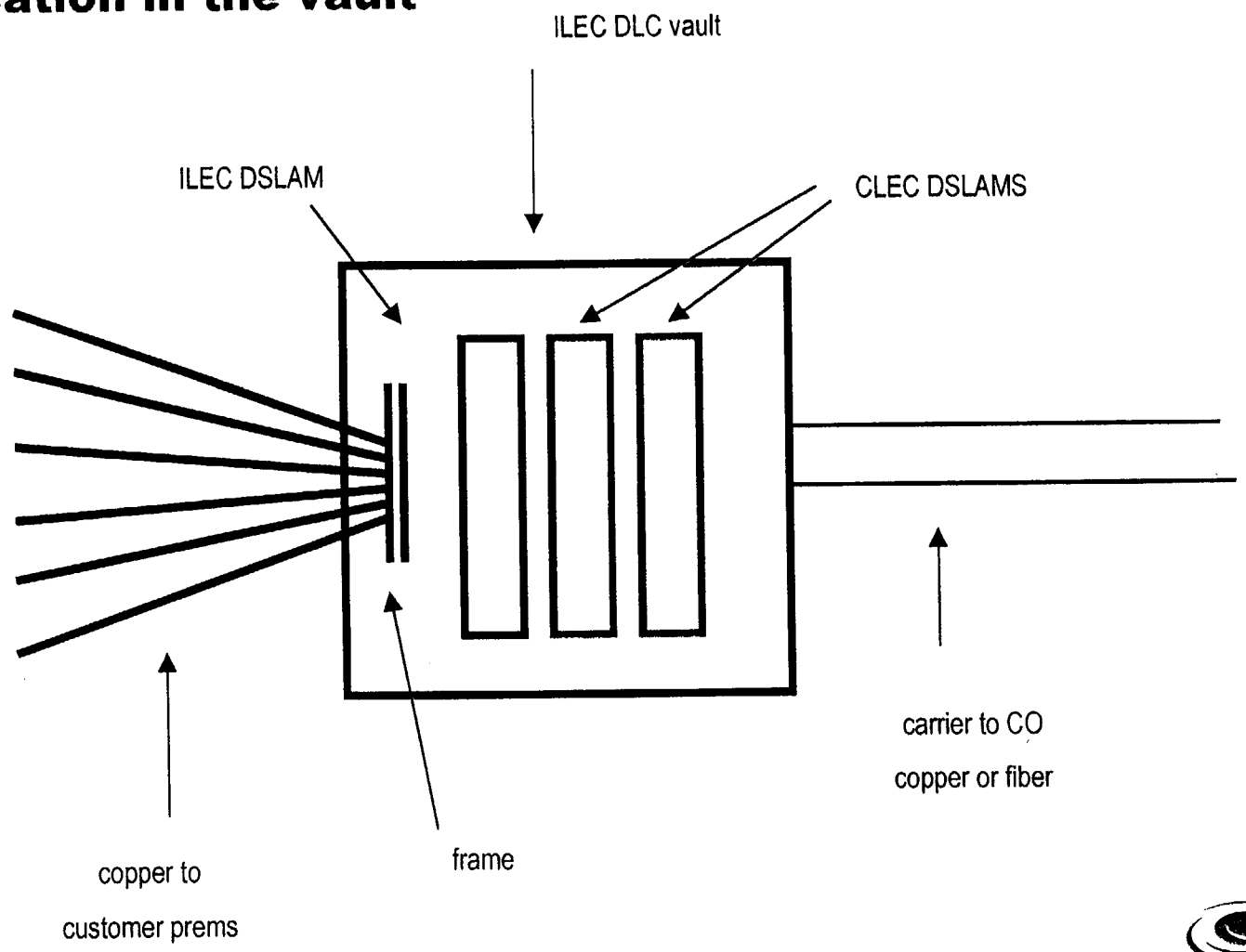
Sincerely,

Jeffrey Blumenfeld
Glenn B. Manishin
Frank V. Paganelli

Counsel for the DSL Access
Telecommunications Alliance ("DATA")

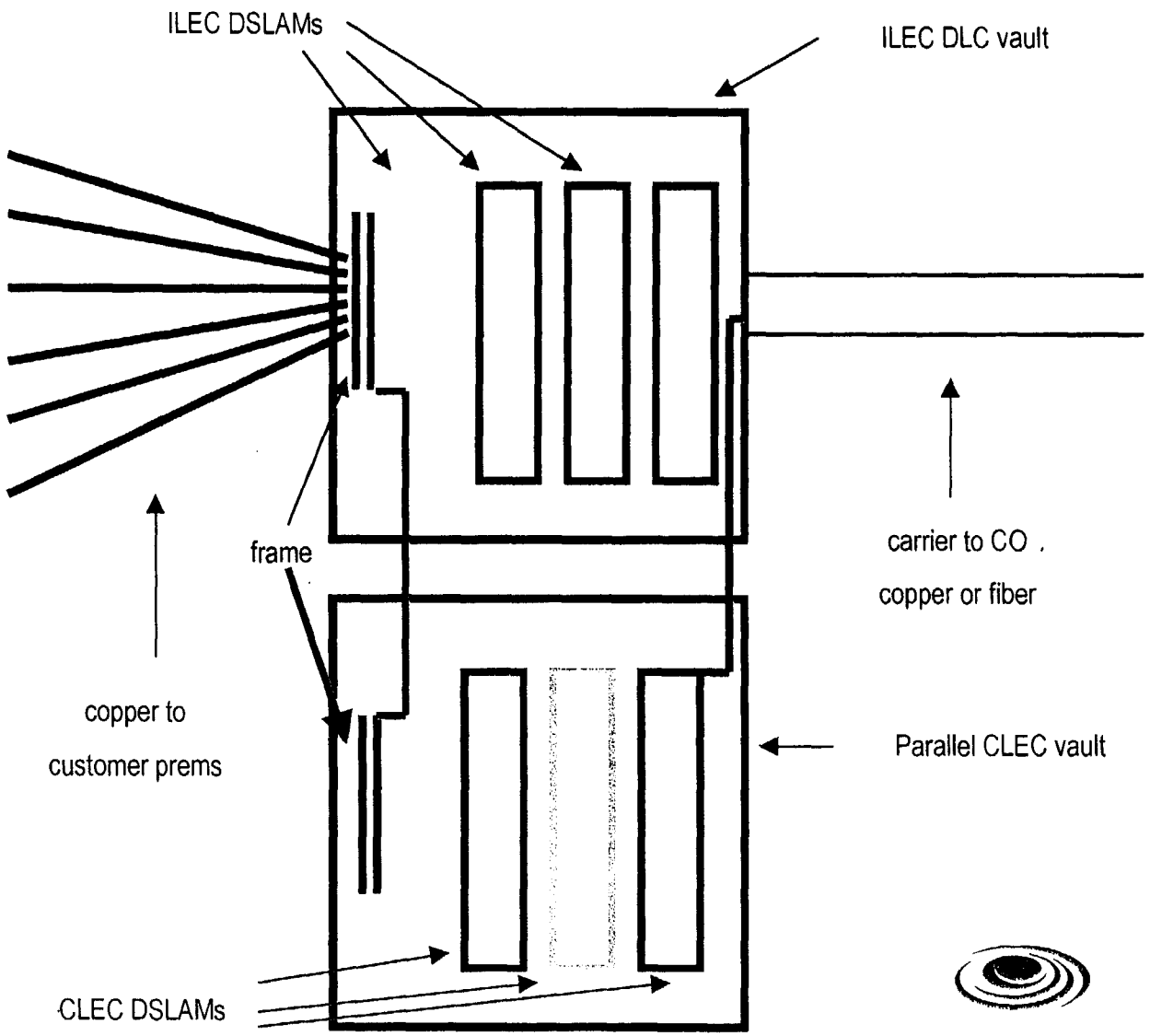
cc: Magalie Roman Salas, Secretary
Robert M. Pepper, OPP
Dale Hatfield, OET
Stagg Newman, OET
Jonathan Askin, CCB
Daniel Shiman, CCB
Thomas Power, Chairman Kennard
Kyle Dixon, Cmr. Powell
Kevin Martin, Cmr. Furchtgott-Roth
Paul Gallant, Cmr. Tristani
James Casserly, Cmr. Ness

Alternative 1:
Collocation in the vault



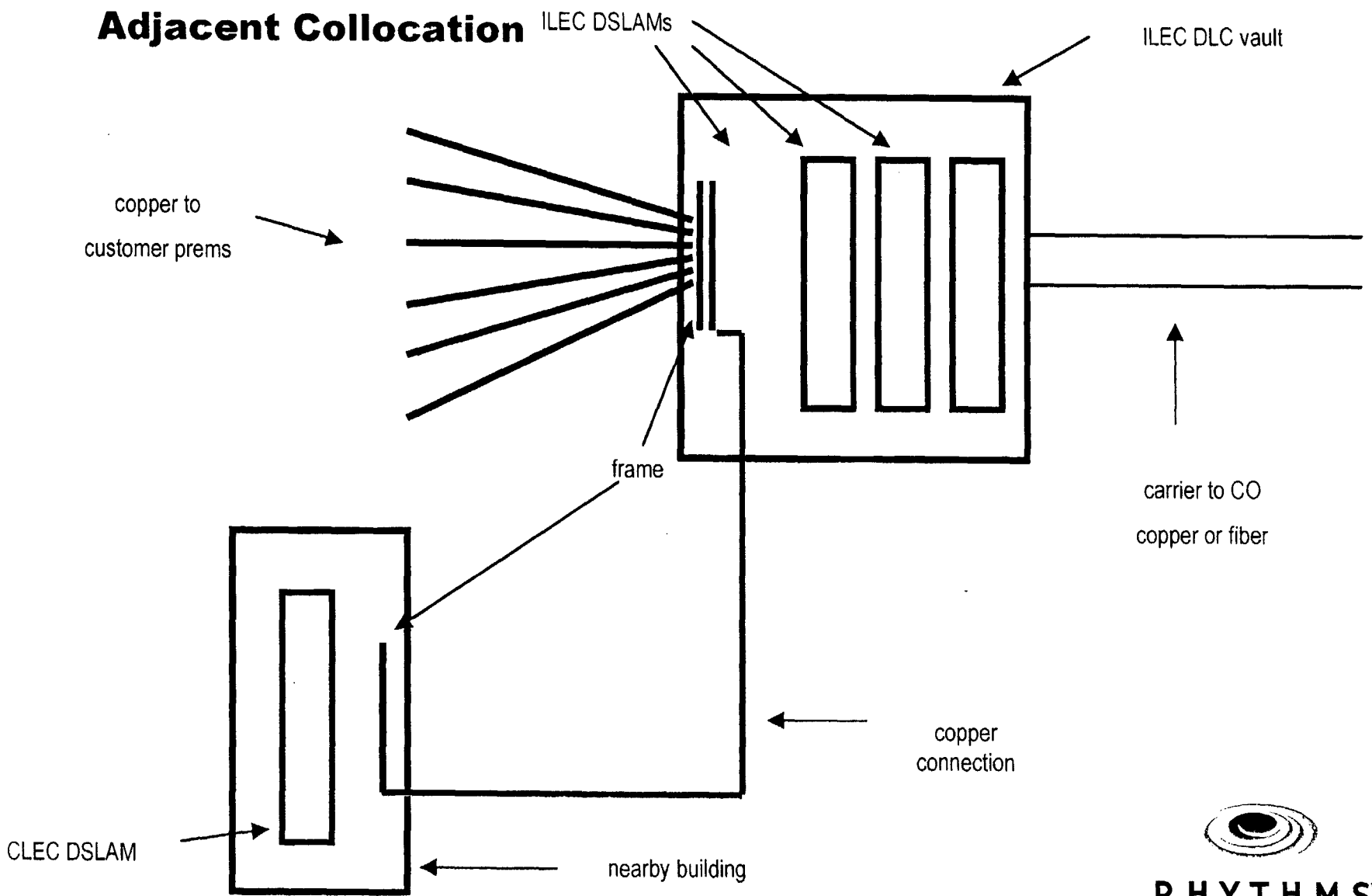
RHYTHMS™

Alternative 2: Second vault



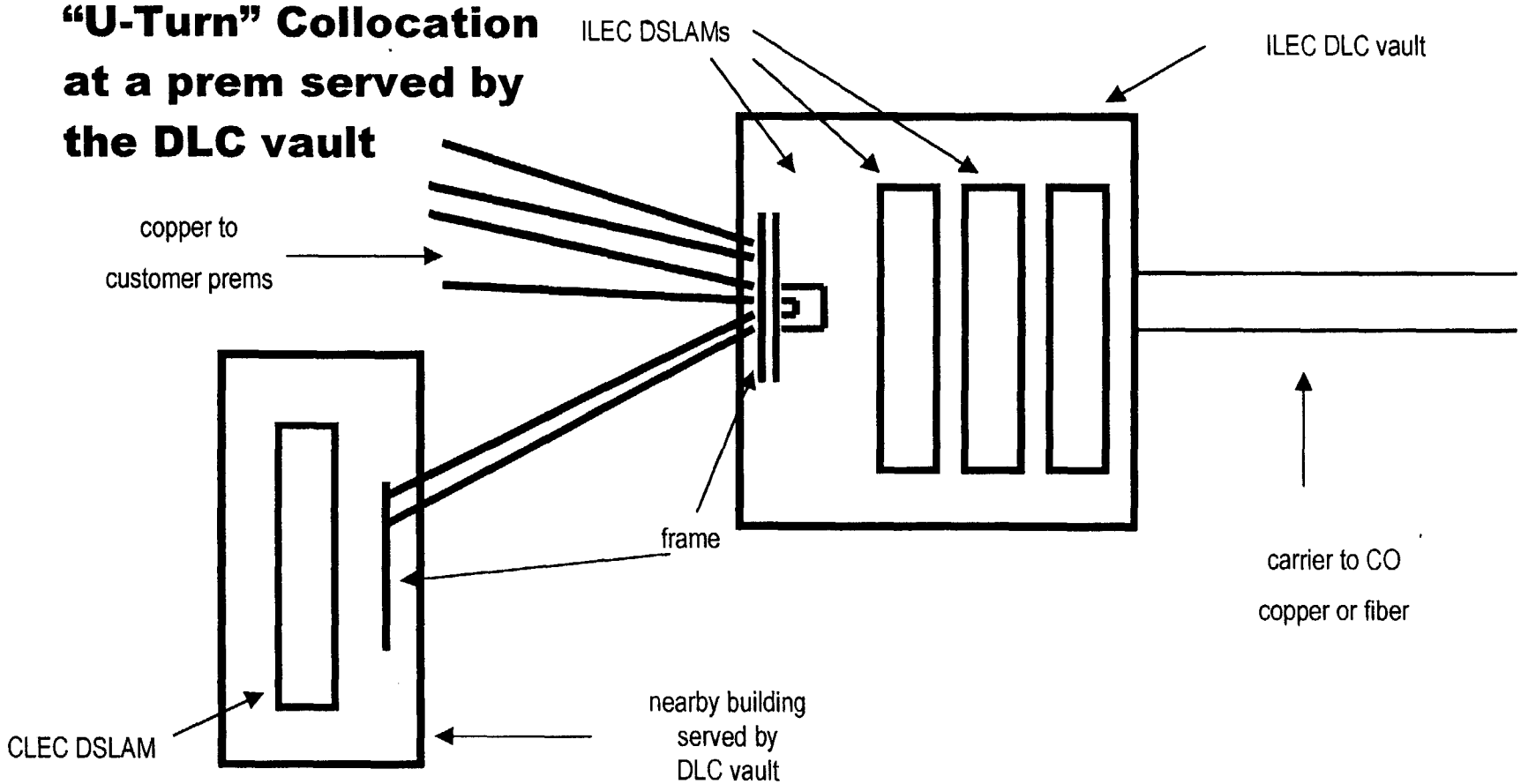
RHYTHMS™

Alternative 3: Adjacent Collocation



RHYTHMS™

Alternative 4: "U-Turn" Collocation at a prem served by the DLC vault



RHYTHMS™