



Biography of Charles J. McMinn

Mr. Charles J. McMinn is President and Chief Executive Officer of Covad Communications Company. Mr. McMinn is a founder of the company and also serves on its Board of Directors. He is responsible for the strategic direction of the firm and its day to day operations.

Mr. McMinn has over twenty years of experience in creating, financing, operating, and advising high technology companies. In the last several years, he has focused almost exclusively on information technology and communications businesses while managing his own consulting business, Cefac Consulting. Mr. McMinn has worked closely with a variety of major consulting firms, including Gemini Consulting and Regis McKenna. His most recent engagements included defining a strategy for Lucent, Intel and Broadband Technologies to accelerate the deployment of Fiber to the Curb technology and providing advice to Ameritech on business strategy for Asynchronous Digital Subscriber Loop (ADSL) data services.

From 1992 to 1993 Mr. McMinn was the first President and CEO of Visioneer Communications where he raised \$5.5M in venture capital and grew the organization to 20 people. Prior to Visioneer, Mr. McMinn held numerous marketing and engineering positions in Silicon Valley companies including Director of Engineering and Director of Marketing for Megatest Corporation, a venture backed startup in the Semiconductor Test Equipment business.

From 1986 to 1992 Mr. McMinn was a General Partner at InterWest Partners, a venture capital partnership located in Menlo Park, CA. While at InterWest, Mr. McMinn was responsible for all aspects of the venture capital investment process for early stage technology companies and served on the Board of Directors for five firms.

Mr. McMinn began his Silicon Valley career as the product manager of the 8086 microprocessor at Intel Corporation.

Mr. McMinn received a Bachelors of Science in Electrical Engineering from Brown University in 1974 and a Masters Degree in Electrical Engineering from Syracuse University in 1976. He received an MBA from the Harvard Business School in 1978, where he was a Baker Scholar graduate.

***Before the Federal Communications Commission (en banc)
July 9, 1998***

***Chuck McMinn, Chairman of the Board,
Covad Communications Company***

Mister Chairman, Commissioners, I appreciate the opportunity to talk to you today.

Since its founding just 20 months ago, Covad has built an all-digital, all-packet network in the San Francisco Bay area that passes well over a million homes and businesses. We are continuing our expansion this year into the metropolitan markets of Seattle, Los Angeles, Boston, New York, and Washington.

Covad's advanced telecommunication network is used by two sets of customers. Corporations use it to connect employees who work at home to their multi-state and multi-national computer networks. From their residences, workers connect at the same speed and security they would have in their corporate offices. Covad's network is also used by ISPs to provide their small business and residential customers with affordable, high-speed Internet access.

Covad provides service to workers where they live. Our network is a residential network. We have an abiding interest in collocating in Central Offices that serve residential areas.

We provide residential connection speeds ranging from ISDN to T1 using several DSL technologies. Our network architecture involves leasing a local loop, locating equipment in the end-user's home and compatible equipment at the termination of the copper twisted pair. This is usually, but not always, in the serving Central Office. From the Central Office, traffic moves to Covad's regional data aggregation center, and, from there, to a company computer network or an ISP.

Simply put, Covad would not be in business without the Telecommunications Act, its implementing regulations, and the access to unbundled network elements and interconnection that is

provided. Implementation has not been easy. For example, we have an antitrust suit pending against Pacific Bell. (Information was included in one of our recent FCC filings.)

However, *overall*, at least with respect to early adopters of DSL services, the promise of competition in the Telecomm Act is in the early stages of realization.

The challenge is to move beyond offerings to early adopters. If this Commission and each State Commission are to encourage the deployment of advanced telecommunications capability to *all* Americans on a reasonable and timely basis, then commercial concerns relating to cost and delay need to be addressed by public policy.

The FCC is justifiably concerned about the pace of DSL roll-out to all Americans. We are also concerned—the pace Covad's roll-out is too slow, caused by a maze of hurdles constructed by incumbent LECs, from unreasonable collocation practices to spotty access to loops capable of supporting these services.

I suggest the Commission address the structural problems associated with the reasonable and timely introduction of advanced services to all Americans by considering a structural solution.

If ILECs wish to provide DSL services in-region, they should be required to provide these services through a separate entity. This separate entity would have to obtain the inputs essential to provide DSL service in exactly the same manner as Covad or any other competitor. By "exactly the same", I mean "exactly the same" – the same procedures and costs to obtain local loops, interconnection agreements, collocation space, OSS, and so on, would apply. Such an ILEC-originated entity should face the same obstacles that my business faces every day.

In theory, Covad supports the concept of a separate ILEC entity. However, as you know, the details of how this plan is implemented are important, and not any "separate subsidiary" would do. Indeed,

implementation of this concept would need to take into account a number of concerns.

For instance, we need to ensure that the separate ILEC entity not be the only DSL provider that can collocate in a particular central office. Therefore, the Commission should ensure the existence of a competitive market by requiring that at least 4 other CLECs are collocated in a particular central office before the separate ILEC entity be permitted to provide deregulated interstate packet switched data services from that central office. A structural solution like this is consistent with solutions the FCC has used in allocating PCS spectrum, assignment of orbital slots and other similar situations.

There should be on-going and detailed public reporting and accounting practices for this separate ILEC entity. These reports also should include sufficient information to ensure that the separate ILEC entity is not receiving favored treatment from the ILEC network provider.

Companies like Covad should be able to obtain access to unbundled copper loops—both physical ends of the copper wire—in the same manner as the separate ILEC entity. Loops should not be rendered “unbundleable” merely because the ILEC entity is providing service to a particular customer.

Moreover, the separate ILEC entity should be required to provide its services pursuant to the terms of an already-existing interconnection agreement. There is an inherent problem in having the ILEC “negotiate with itself”, and ILECs have taken the position before you and the Courts that Section 252(i) of the Act only permits CLECs to “MFN” an entire, pre-existing interconnection agreement.

The whole point of this endeavor is to ensure that “all Americans” obtain access to advanced telecommunications services. I believe it does not overstate the situation to say that the United States is at a regulatory cross road. If ILECs insist upon being able to offer these services on an integrated basis, there is only one option available to the Commission: endless disputes and litigation as to what constitutes an “interLATA data” service, increased regulation in the

form of cost allocation proceedings (to “fairly” attribute costs as between DSL and POTs), extensive investigation into ILEC “no space for collocation” claims in central offices, spectrum unbundling proceedings (to determine whether, and under what circumstances, competitors were entitled to use the ADSL frequencies of a loop over which an ILEC continued to provide POTs), and seemingly endless litigation over these disputes.

The United States can go down that road. Or it can go down the road that I have just outlined—a structural solution to inherently structural problems. Whatever the Commission does in this regard will have huge future effects given the rate of growth for packet switched services.

Covad cannot satisfy the pent-up demand on competitive terms if necessary elements of its service are unilaterally determined to be unavailable in residential neighborhoods, are subject to delay, or if innovation is artificially retarded by regulation that effectively rewards legacy technology.

We need at least the following four fundamentals if we are to bring innovative new services to the mass market. I believe that a properly-constructed structural solution will help hasten the implementation of these fundamentals—

First, reasonably priced physical collocation in every Central Office.

Covad has had some success with “cageless collocation” as a means to reduce cost, time to market, and unilateral ILEC claims of “no space available”. We have reached an accommodation with US WEST. Other ILECs, like Bell Atlantic, have not been cooperative, promising instead state-by-state opposition to an admittedly “technically feasible” approach to minimize the anticompetitive effects of ILEC control of this bottleneck facility.

Second, local loops that are “priced right”. For example, many ILECs and States have imposed digital loop premiums. Digital loops do not cost more to provide than analog loops and more often than not *are the exact same copper facility*. Pricing digital loops with as

much as a 50% premium levies a "broadband tax" on high speed access that delays mass market deployment.

Third, prompt provisioning of DSL-capable loops and associated OSS in whatever manner an end-user requires them. Covad's current technology allows high speed service to homes beyond 18 kilofeet from the central office and to the ever-increasing number of homes served by fiber-fed digital loop carriers. But the introduction of that technology should not be impeded by regulation or legacy philosophies or operations. Local loops should be viewed as extensions of an end user's CPE – the subscriber should make a choice about service that would drive the technology supporting the local loop. An ILEC should *not* decide subscriber service levels either by inaction or technology fiat. [Covad has available a working paper that discusses technology issues in a public policy context.]

Fourth, freedom to place equipment in, and otherwise use, collocation space in a manner of our choosing in order to introduce the most efficient, evolving network architectures. ILEC attempts to limit the introduction of modern miniaturized equipment modules reflects, at best, an outmoded circuit switched world view.

It is clear that we are far away from these fundamentals being in place nationwide.

Indeed, the same ILECs that provide the cost studies that often result in high digital loop premiums, now promise DSL service at prices insensitive to state-to-state cost variations of that very same critical input – the local loop. Moreover, their federal tariffs would allocate all of the loop costs associated with DSL provisioning to subsidized POTs. These ILEC tariffs take the affirmative position that the loop is "free" for ILEC DSL service. In contrast, the loop is the single largest recurring cost that Covad faces!

The same ILECs that object to Covad's cageless collocation proposals provide themselves with cageless collocation and its attendant cost and speed advantages. Some ILECs promise DSL

provision from Central Offices where, they have informed us, no space is available to collocate our DSL equipment. By ignoring provisions of the Act requiring determinations of "no space" be made by State Commissions, ILECs effectively and unilaterally control the critical input of Central Office space and its usage.

The same ILECs that control what and when essential facilities will be made available to Covad and its ISP customers are the same ILECs that operate their own ISPs whose offerings are increasingly and inherently bundled with both DSL and subsidized POTs.

Creation of separate, ILEC-originated entities would not guarantee that the remaining ILEC would provision necessary facilities in a timely fashion, but it could eliminate the comparative disadvantage of existing data CLECs. Moreover, a structural solution could create a much-needed incentive for ILECs to open bottleneck network facilities on an identical basis to all competitive entrants.

To be successful in reaching *all* Americans, this Commission should recognize the national importance and interstate characteristics of DSL services and the facilities used to provide these services. Unlike other technologies that may also be capable of providing broadband service, DSL is being provided today using copper infrastructure that is already ubiquitous.

Covad employees, and our principle suppliers, see themselves as adjuncts to the computer industry. We are dedicated to providing cheaper, faster, better products that utilize the most innovative technologies. Collectively, we need to ensure that the 40 million home computers now connected to the wrong network – the legacy monopoly circuit switched network – are, in quick order, connected to the right network – a continually innovative, competitive, packet switched network.

Thank you for your consideration.