

IbssNet Internet Service

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In the Matter of)
Inquiry Concerning High-Speed) GN Docket No. 00-185
Access to the Internet Over)
Cable and Other Facilities)

Comments Prepared by Jeff Gerhardt, CEO of IbssNet Internet Service.

IbssNet is a member of the following Associations: The ISP Consortium, The American Alliance of Service Providers, Linux International, The Naperville Illinois and Aurora Illinois Chambers of Commerce.

NOTE: PART ONE IS COMMENTS ON MY QUALIFICATIONS AS A MEMBER OF THE INTERNET COMMUNITY. PLEASE SKIP TO PART TWO TO GET DIRECTLY INTO THE WHY THIS COMMENT IS NEEDED AND THE DISCUSSION OF THE ISSUES.

Part One- Introduction And A Discussion of Qualifications

I would like to thank the commission for giving a broad range of people and businesses the opportunity to respond to the issue of broadband Internet and the concept surrounding the issue of "Open Access." This is perhaps one of the single most important issues that will face both the FCC and the world-wide Internet community.

The first question that needs to be resolved is if I am even qualified to comment on this issue. I feel very qualified to respond to the NOI for a number of reasons.

The first reason I feel that I am qualified is because I am a classic Internet entrepreneur. IbssNet is the fifth Internet firm that I have been involved with at start-up or early development. I have witnessed friends and partners make and/or lose fortunes over the last twenty years. Indeed I have been on both ends of the success scale myself with "Dot Com" ventures.

At some of these firms I have participated in the development of Internet technologies that today are just taken for granted.

In 1995 and early 1996, while director of development at WorldWide Access, I was instrumental in the initial development of a new Telco network architecture called Virtual Dial-Up (VDU) or by some Virtual FX. Although I did only a small fraction of the engineering, I claim the initial idea. This came about by simply asking why AT&T SDN (Software Defined Network) core switch software could not be applied to 5ESS switches.

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The software was already being used to build private WAN. There was no reason why it could not be used in the case of a 5ESS and "virtualizing" phone circuits across a LATA so that all the modems servicing a LATA could be in one location. Ameritech, the local RBOC said it could not be done, so we took the idea to Metropolitan Fiber Systems, an early CLEC. MFS saw the merit and helped us develop the system. MFS made so much money on VDU they were quickly purchased by Worldcom.

VDU is now the dominant way of doing dial up in the US today. It made it possible for an ISP to offer "A" band coverage across a LATA for a very reasonable cost. VDU also gave birth to the concept of a Non-facilities based ISP.

In 1997, Kevin Hill (also one of my present partners) and I became internationally recognized for the development of the JAVA Video Push Server, the first practical push server in the world; that would allow content to be pushed out to users on the Internet. That "push" technology allowed us to develop the worlds first Internet based video security system, that we packaged as "KidCam" the 1997 "Hot Pick" Product for the Internet World expo. KidCam would allow a parent to have a minimized window on their computer at work that they could open to view or even talk to their children at home or in day care. KidCam was featured on shows such as 20/20 and Primetime.

The second reason why I am qualified is I know and understand the Internet, and its associated culture, far better than even the vast majority of the people who are in it as a career. The reason for this is I am of a rare breed of Internet Dinosaur. I have literally been involved with a "hands-on" role in most of the shifts the Internet has experienced.

As a short list of examples.....I have been using the Internet since the "ARPA Net" days. As a college student in 1975 I worked on segments of the ARPA deployment via the old Plato System popular in many major Midwest universities (for which I was paid \$1.90 an hour). I worked as a CompuServe Sys-Op in 1979, heading up the Radio Shack Color Computer Special Interest Group(SIG). I operated a number of BBS systems through the 1980's and into the 90's. I helped launch the second ISP in the entire Midwest to open for business. That ISP was WorldWide Access, one of the strongest regional ISPs in the nation when it was sold to Verio. I helped start one of the first webcasting entities, The Tech Talk Network, an entity that was later purchased by CNet. I was a beta tester for the original Miribilis ICQ software that gave birth to Instant Messaging. I could go on and on with my involvement.

The third reason why I am qualified is I am a certifiable Linux Geek (note: I said certifiable on purpose). I am recognized around the US for my leadership in the development and advancement of the Linux Operating System. I do a weekly talk show called "The Linux Show" that discusses topics related to this industry group. Linux is leading the way toward a new competitive environment for the computing world. Indeed, Linux has revolutionized the competitive sphere in the server space. The battle between Linux (indeed all of the UNIX versions) and the world of Microsoft has been a hard fought battle indeed. But we have not won the battles on merit alone. My experience with Linux has reinforced what I have learned in the Internet business, that a free market can only be free IF they players allow it to be so. The government was needed to intervene with Microsoft to stop their predatory practices.

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The fourth reason why I am qualified to discuss this issue is I happen to know a fair amount about Internet Over CAVT. I first became involved Internet Over Cable back in 1995 when I did some consulting and engineering with the Jones Cable Company. I have over my Internet career consulted on several Internet Over Cable deployments.

The LAST reason why I am qualified to comment is my passion. I love the Internet. I have spent "man-years" of my life in front of a computer either on-line, or making it possible for someone else to be on-line. My passion for the Internet tells me that it is at risk, and I need to comment.

Part Two- Why am I commenting?

Presuming that you now accept that I am qualified to comment on this issue, the reason for my comments that follow is simple. It is IMPORTANT that STRONG regulatory action by the FCC be taken NOW to secure the long term goals and objectives of the 1996 Telecommunications Act. If no action is taken, the hoped for changes of more competition and wide spread broadband service in the telecommunications industry could be nothing more than "hopes."

The evidence for my concern is everywhere, but I will only site Two Cases. Neither of them is about AOL or Time Warner. You already have plenty of evidence on that specific issue. I will talk about Cable Broadband and DSL in the Chicago markets as my two case points.

Internet Over Cable

Cable Broadband development here in Chicago is a great example of WHY additional regulation is needed. In 1996 a consortium of ISPs was formed in Chicago to explore the options of Internet delivery over cable TV systems, and the direct feasibility of deployment in Chicago and the surrounding area. I happen to have been the chairman of the consortium. After many months of investigation, evaluation of cable plants and extensive engineering, we came up with a plan. This plan would expedite the expansion of Internet Over Cable TV and at the same time create a business atmosphere that would allow the small ISP serving small area communities to thrive. Most important, it provided a significant profit motive for the cable company. The profit motive was based upon similar revenue generation a cable company would experience on profit sharing of premium services such as HBO.

We met on several occasions with the people at Jones Intercable and showed how through cooperation this association could benefit the community, all the businesses involved, and could conservatively put an additional \$38,000,000.00 a year into the pocket of Jones Intercable from their Chicago franchises alone. **We even offered to create a \$25,000,000.00 fund** that would help finance the initial costs of conversion of their older networks. After several months of negotiations, where we accented to virtually every request by Jones, we were turned down.

TCI and Prime Cable similarly turned us down.

Since then all the Jones Cable properties in Chicago were purchased by TCI. Later of course TCI was purchased by AT&T. Five years later still no Internet Over Cable. Our plan would have most of the Chicago Market turned up in 18 months, with literally dozens of service options.

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So, why would Jones NOT accept such a good deal. Hindsight shows it is CLEAR that they NEVER came to the table in good faith. They were only talking to us to gather more information. They had no intention of offering the service WITHOUT maximizing the monopoly first. The limited scope and version of Open Access now being forwarded by the MSOs' shows conclusive proof that this attitude is PERVASIVE THROUGHOUT the cable industry. They do not care about the wants and needs of the subscriber.

DSL

DSL is another great example of the need for additional regulation. I have "personally" been selling DSL service here in the Chicago market since June of 1999. But that is not when I tried to start selling DSL.

I TRIED to start selling DSL in the fall of 1997, while the director of Development at WorldWide Access. I had spent a good deal of time building a proof of concept test in two separate communities in the Chicago market. Our local RBOC, Ameritech, participated with us on this test as they were a telecommunications vendor to our firm. We had near 100 T1's installed around the metro area. After the completion of the test we negotiated with Ameritech to purchase "dark copper." After nearly a month of negotiation, they walked in the door and handed us a new tariff that said we could no longer buy copper from them without CLEC papers. By writing that new tariff Ameritech effectively put us back to square one in developing a DSL business model. Long before we got through the process of becoming a CLEC and offering DSL, we were purchased by Verio.

So, in June of 1999, armed with what looked like better regulations from the FCC, I launched a new ISP in the Chicago Suburbs as a reseller/partner of Covad. We started out with quite a bang. We had nearly two thousand homes and businesses apply for service. Apply and install are two separate things. Out of all of those we qualified for service, we had only 22 consumers and 18 businesses installed after a full year. Every possible stall and game was played to delay service. When you are spending money on advertising to develop potential traffic for 50 installations a month, and you only get a net of 40 installs after the first year, it is easy to guess at what would happen next. The net result was that by July of 2000 we had churned through what we thought would be 2&1/2 years of operating funds. Pinnacle closed for business at the end of July, 2000.

It does not take a rocket scientist to figure this situation out. The longer the growth of DSL is delayed, the greater the odds of success of the Ameritech DSL offering. Even with multiple clarifications by the FCC on the need to expedite DSL installation, the ILEC Ameritech has done whatever it takes to NOT get them done.

Here is the irony. Being the entrepreneur I am, I was unwilling to accept defeat and started up a new ISP in September of 2000. We do offer DSL service. However, we do not make it a stress of our business. And, that is good because since we place our first order in October we have only seen 2 circuits installed. Today, January 9th 2001 Ameritech did not show up to two installations. You have to wonder.

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Part Three- Discussing the Issues

Most of the discussion issues presented by the NOI can really be blended together in the same basic discussion of the issues.

The first issue I think that needs focus is in **Section III paragraph 15 and 16.**

"...we invite comment on whether cable modem service and/or the cable modem platform is a cable service."

I will not argue this on the basis of regulatory policy, but as an extension of typical use and practice by the local franchise company.

Internet Over Cable IS NOT a cable TV service PERSAY but must be viewed as a Access Platform.

To call it such, or regulate it in such a way would be absurd. Cable channels are allocated based upon local content requirements, franchise requirements and what makes the cable company the most money. This revenue is from ad inserts of a share of PPV fees for premium channels. In the Internet the USER selects the content type and content delivery method, or even CREATES that content and delivery method. In a simple model, Cable is a "Top Down" content model, where as the Internet is "Bottom Up."

Section III paragraph 18 goes to the core of the issue.

"...should we, if only for definitional purposes, sever a telecommunications component from other functions that may be provided?"

YES you should, The infrastructure, the cable platform is a component, nothing more than a UNE for a telco.

Further, this would mean that the revenue from that infrastructure IS subject to Universal Service fees.

"...Is it possible for cable subscribers to specify the ultimate points of communication on the Internet?"

In most cases YES, Dial Up ISPs do little else but get out of the way of their subscribers.

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Paragraph 19 asks

"Assuming that cable modem service or the cable modem platform contains a "telecommunications" component, does it follow that the cable operator is providing a "telecommunications service?""

It is a platform capable of delivering service.

The cable operator is managing a delivery platform capable of data transport, just as a backbone provider or a local phone company can provide transport over their network. The existence of the delivery method neither mandates nor excludes offering service. The regulatory issue is simple as I see it. IF a transport provider is an incumbent with a defacto monopoly they should be subject to the same transport requirements of leasing that infrastructure to competitors at a reasonable rate.

To the extent that the cable operator is providing a telecommunications service, does this make it a "telecommunications carrier" or a "common carrier," or both?"

In this case BOTH.

Paragraph 20 asks two key questions.

"How would the Commission determine whether cable modem service was provided at rates that are just, reasonable and not unreasonably discriminatory?"

Is this really that hard? OK, how much do they make off HBO?

A cable operator should get fair and equitable compensation for the transport of data across their network, just as they get fair compensation by offering channels to content developers in exchange for a share of the ad insert or a share of revenue on premium pay channels. In the case of DATA the cable operator should get a similar reasonable compensation for committing resources and bandwidth to the transport of data services, separate and independent of those data services.

According to the resources I was able to tap into to get revenue information, and sitting with industry consultants I was able to determine that it is reasonable to expect that a operator of a community servicing 25,000 homes connected should realize 6,000 transport subscribers, IF pricing was reasonable. Charging \$20.00 for transport and (in this model) bandwidth to the internet, the operator would be generating \$120,000 per month. If the same operator had a SUPER deal with HBO, they might generate \$30,000.00 a month from HBO.

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"How would the Commission determine whether the manner in which cable companies allow unaffiliated ISPs to "interconnect" with the cable modem platform is just, reasonable and not unreasonably discriminatory?"

The answer is "OPEN ACCESS & PEERING!" Open Access assures reasonable pricing. Peering provides the path to fair interconnection for the LOCAL ISP.

The reality is that **IF** the platform and the service are separated, as I believe it should be, the subscriber will be able to get service from anyone, anywhere in the world. In that scenario, a Spanish speaking person could subscribe to a service in Mexico while getting interconnection via the cable PLATFORM. This would also allow the subscriber to that transport service choose to use FREE services (ad based or otherwise) located out on the Internet.

Most ISPs I have spoken with that DO charge for service, place value of the service itself (those costs not related to dialup or the DSL connection) somewhere between \$4.50 per month to as high as \$14.00 per month. The reasons for ISPs having differences in the value of the service function, is indeed THAT SERVICE. A wide variety of choices with a wide variety of prices (including FREE) will give the end user the service they want for the value the consumer is willing to pay for that service.

Part Four- The Solution, why is it viewed as so "complicated"?

The solutions here are really very simple. The solutions could also use some of the same methods used by the BBS's and infant ISP's when we gave birth to the commercial phase of the Internet. So we are NOT operating in uncharted waters.

1) Unbundling The Network-

A Cable Franchise Operator should be defined as a **Incumbent Cable Data Provider**, and mandated through regulatory policy to consider the part of the network infrastructure used for DATA services as a **UNE** or Unbundled Network Element. This is a simple principle now being used by ILECs and CLECs. The cable operator would lease that UNE direct to the enduser, or in bulk to a competing ISP. The Cable Franchise company WILL generate significant revenue from the data transport over their network. The cable franchise holder as the Incumbent Provider, must lease that transport directly to end-users or at wholesale to competitors at a rate not greater than what would be charged as the line item of a "Full Service" offering; that would include email and other services.

This organization would do three things. It would allow the consumer the ability to purchase services or even obtain FREE services (such as free email from Yahoo.Com) from the source of their choosing. It would allow businesses within the community to have a fair and equal opportunity. And, it would allow the Cable provider to derive significant income from the service offering regardless who provides the services to the consumer.

If it were not for T1's being a unbundled element the ISP industry may be no where right now.

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2) A whole new class of ISP, the "LISP"

I suggest the creation of a whole new kind of telecommunications regulatory designation, that of the LISP, or Local Internet Service Provider. The guidelines can be simple. First you must be local, with local facilities, local brick and mortar. You must have as a part of that facility, some sort of local service platform, be it a single server or a room full of equipment. Second, you have to be contributing member of the community. This again is simple for a real local company to do, it is as simple as joining the local Chamber of Commerce, or local Rotary Club, just like millions of small and medium businesses across the country do.

What is the benefit to this LISP? Simple! The legal authority to Peer and Interconnect to any locally provided DSL or cable TV delivered data service.

What is the benefit to the community? If done fairly, the LISP will assure both competitive pricing and local HANDS ON support from an agency separate from the cable or DSL operator.

3) Peering-

To better facilitate the development of Internetworking on the local-level, and provide a fair and equitable playing field, Peering should be a requirement **Incumbent Cable Data Provider**. Peering is a simple process that all Internet folk understand. On the local level a Peering group will form among local ISPs who discover that a significant amount of their traffic is too each other, and that by peering resources can be better utilized and even shared.

The issue becomes **WHO should be allowed to Peer?** That is simple, Peers Peer with Peers. In order to interconnect in the LOCAL head end, you need to have a physical presence in the community. There should be NO LIMIT TO THE NUMBER OF PEERS, as long as they are a part of the community.

This would not prevent the MSO from forming Peering groups with regional ISPs at a "super head end" location. Plus every internet company in the world has the option of providing service on a virtual basis.

The process of forming a Peering Consortium, whether as a profit or non-profit entity is well know. An advisory board is formed. Engineering is done to determine costs and a location is picked. Typically a lottery is held among the participants of a Peering group to determine location, or it is just deemed by mutual assent. Logic says that a Peering group to Cable Provider should probably be located adjacent to the local cable head end.

To participate in the peering group, the participating local ISP must sign a long term agreement (24 months), install a T1 (or whatever other circuit is needed) to transport from the local ISP server room to the peering point, and provide the appropriate amount of cash to provision infrastructure at the head end. These are typically LOW costs. Cisco offers significant discounts for equipment used in peering groups. There is typically a one time charge of about \$2,000.00 to join and connect to a local peering group.

4) Bandwidth Options

With Peering in place, even BANDWIDTH becomes a part of the competitive options. The cable operator may have the option of including bandwidth as part of the interconnect or not. Competing service provider could compete based upon Over Subscriber ratios of their bandwidth as well as the varied services they provide.

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5) Help groom Service Development

It is important for the next group of regulations to support the growth of service. Allowing DSL or Cable operators to determine the delivery platform and service/content mix, you are hamstringing not only the development of new content (and content types), but pressure being applied to DSL and cable operators to continue to develop and improve their infrastructure.

This can only happen by regulating the opportunity for those content and service providers to have the chance to get to the network. Anything less than a 100% open network will be the doom of local ISPs and content developers across the nation.

6) OPEN ACCESS, OPEN ACCESS, OPEN ACCESS

Open the network!

Open Peering to ALL LOCAL BASED, FACILITEIS BASED SERVICE PROVIDERS.

Open Virtual Access to ALL service providers around the world.

Let the content FLOW UP!

Thank You
Jeff Gerhardt