

## BluegrassNet

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Marlene H. Dortch  
Office of the Secretary  
Federal Communications Commission  
445 12<sup>th</sup> St., SW  
Suite TW-A325  
Washington, D.C. 20554

Re: WC Docket No. 04-405

Please accept this formal response to the petition for forbearance that was filed by BellSouth regarding the incumbent LEC provisioning of broadband. This response will hopefully convey the seriousness and potentially harmful impact of such a forbearance on a company like BluegrassNet.

### Introduction To BluegrassNet

BluegrassNet is a regional Internet Service Provider, based in Louisville, Kentucky, serving the central Kentucky area, Lexington, Kentucky area, as well as the Fort Knox / Elizabethtown areas. We currently have approximately 20 employees working full-time, with an accompanying number of part-time employees. Our Internet Service Provider is what we would call a "business ISP" in the sense that we focus on providing traditional ISP services coupled with IT network consulting services. The traditional ISP services that we offer include: dialup Internet access, dedicated Internet access (through T-1, T-3, Frame Relay, ATM, etc.), e-mail services, web services, database services, data backup services, server collocation / data center services, and of course Internet access via "Broadband" which in our case is ADSL running over Bellsouth & Alltel DSL Infrastructure.

Currently BluegrassNet has approximately 2,500 unique customers. These can be individual residential users or businesses with many users behind their networks. Of the 2,500 paying customers, approximately 1,000 are businesses in the Louisville & Lexington, Kentucky markets. To give you an idea of our market share, the local chamber of commerce estimates that there are about 20,000 "businesses" in Louisville, which would include everything from small mom & pop operations, to large corporations. We use broadband ADSL to reach approximately 600 of them. The rest are connecting on traditional dedicated connections such as T-1's, or dial-up connections.

As you can expect, BluegrassNet does not support forbearance at this time, and can point out many areas of contention with the petition for forbearance as filed by BellSouth with the FCC. We are particularly disturbed by BellSouth's depiction of the "broadband services market" as a race to be the cheapest provider, solely geared to satisfying price conscious residential users, and completely neglecting the needs of "business class" customers. Furthermore, we take the issue with the generalization that price is the sole reason for choosing one

version of broadband over another. The petition seems to strictly narrow its focus to the battle between “the cable company” and “the telephone company”, and their quest to service the low-cost consumer, yet completely disregards other network providers who deliver “higher layer” services and diminishes the importance of broadband Internet access that is delivered via independent ISPs.

### “Broadband” & “Internet Access” Are Not The Same Thing

We also do not agree with the way the petitioner (and many others) lump the word “Broadband” and “Internet Services” together as a ubiquitous offering that are one and the same, and generally can be inferred as someone surfing the web, downloading music, or checking e-mail. BluegrassNet uses “Broadband” for many things, giving our customers the ability to surf the Internet being one of them, but also for other technical solutions as well. And finally, we view Broadband as a low-cost way of transferring data at greater than 200 kbps from point A to point B. In our opinion, the Internet runs OVER THE TOP of the broadband connection, much as it does over a T-1, wireless, or dialup, *so we view DSL as a transport service similar to other tariffed services.*

### Why BluegrassNet Needs Access To Broadband

BluegrassNet services all sorts of businesses. But it must be remembered, that these businesses, while looking to satisfy a business or technical issue, are also price conscious. In many cases, a business is looking to do more than simply access the world wide web, or check their e-mail. They are looking for higher levels of support and network implementation than the ILEC or the cable company can, or will deliver. Here are some examples of what BluegrassNet does for our customers:

#### BluegrassNet Services Businesses With More Than Just Internet Access:

Due to the fact that BluegrassNet runs its own IP network, and doesn’t simply resell someone else’s IP network (such as Bellsouth.net), we have advanced troubleshooting capabilities that are only possible when controlling the core routers of an IP network. Access to these network elements are extremely important for servicing business customers should problems arise during the course of the day when their Internet connection (and subsequently their e-mail, remote access, and other operational functions) come to a halt. That business needs to be able to call someone for immediate assistance. Running your own IP network allows you to analyze the traffic being transported from that clients node and puts you in a position to troubleshoot immediately vs. going on-site to do a hit-or-miss investigation. By having access to the IP infrastructure, we can monitor traffic for:

- Viruses, worms, Trojan horses either attacking the customer from the outside, or emanating from inside the customer’s network. We sometimes even notice traffic of this nature BEFORE the customer notices thereby saving them the inconvenience and lost productivity of network problems. This is something we do for FREE for our customers, even if they are only paying \$60 per month for their ADSL Internet connection. The importance of having access to the broadband in this case is that there are a lot of businesses that benefit from this, that may not be able to spend the \$300 to \$500 per month loop for a T-1, but can get the job done on the \$33 per month loop of an ADSL connection. Having a company like BluegrassNet lose the ability to offer our customers broadband transport with our own IP network, would mean that significant numbers of businesses would no longer enjoy the benefit of getting their problems fixed quickly, or being notified of network problems, be it viruses, worms, or even malfunctioning equipment on their network.
- Quality of Service at the IP Layer: This is another important function of advanced IP networks, and impacts everything from the future deployment of VOIP to other through-put sensitive applications. By BluegrassNet running the IP network, we can allocate to various customers

what THEY NEED, not what we decide they need. The thing that is not evident in the petition is that the cable company and the telephone company deliver “cookie cutter” IP access. BluegrassNet has a similar network to the ILEC IP network, but because we control our own IP network, including the IP network across the broadband we buy wholesale from BellSouth, we can honor custom IP QOS requests from business customers. We can implement service requests quickly, accurately, and cheaply to allow our business customers to enjoy the benefits of new technologies.

- Fail-over redundancy is another service that we can do, since we are running our own IP networks. In this case, if a customer has a T-1, plus a DSL backup, we can configure the routers (since they are BluegrassNet’s equipment), to offer failover redundancy at the IP layer. This means that if one of the devices fail, or that respective component of the telephone infrastructure fails, the other connection picks up and the customer keeps operating. Implementing this with BluegrassNet is very inexpensive, and any glitches a customer may experience can be quickly addressed since we know the customer, their set up, and the applications they’re executing. Eliminating broadband as a tool that BluegrassNet can run its customer’s IP network over, would essentially raise the cost to the customer, since the low-cost broadband connection, would have to be replaced with a higher priced T-1.
- Another solution that BluegrassNet provides are Virtual Private Networking / Bridge Groups. Sometimes, we have customers that have offices in several cities. In our case, this usually happens when they have an office in Lexington & Louisville. What we do is create a private network for them, using the broadband infrastructure. This is normally something the customer would do with regular T-1’s or Frame Relay and pay exorbitant fees for transferring minimal bits of data. The beauty of broadband is that we can connect this various locations to BluegrassNet through the Alltel and BellSouth wholesale broadband networks, run everything over BluegrassNet’s IP network which rides over the broadband, and saves the customer a lot of money and gives him a PRIVATE network. If BluegrassNet was not allowed to have wholesale access at current rates, such solutions would be MUCH MORE expensive, possibly to the point that certain businesses would not implement new technology due to the higher costs.

### Technical Innovation Made Possible By Independent Broadband Networks

The knowledge BluegrassNet has gained during the course of building and maintaining firewalls, addressing Internet security, and other Internet related trouble resolution procedures, can be attributed in large part to our engineers dealing with issues on a large scale view vs. the end-user viewpoint. When we say “large scale”, we are talking about the particular issues surrounding the support and operation of networks with thousands of nodes. Working on a network like this is a unique experience and not something most router and network technician/engineers get to experience, unless they are running a large multi-node WAN such as an ISP with hundreds or thousands of broadband connections. There are several winners in a marketplace where there are multitudes of IP broadband networks:

- The communications workers: who have a robust marketplace where to search for employment instead of relying on a limited and controlled duopoly to seek higher wages from.
- The consumer (both business and residential): who benefits by having an abundance of experienced and knowledgeable young engineers who learned networking on these disparate IP networks, and are now ready for working corporate IT or doing small LAN or PC repairs.
- The local economy: because of an abundance of experienced networking personnel with real life experience will bring the latest technologies to everyone and not just a chosen few.
- The technology industry: because of the innovative ideas that will come from a well trained and experienced workforce.

Specific acts of innovation that BluegrassNet has participated in were quick resolution to the Melissa virus, Sobig worm, Microsoft SQL worms, custom mail programs, centralized server management projects, etc.

### Independent IP Networks Are Important To National Security

We would also like to remind the petitioner of the importance of independent IP networks as they relate to National Security issues. The fact that most network intrusion activity occurs at the IP layer and above, and not at the transport layer, are indicative of the sensitivity and vulnerability of these higher layers. The very well-being of our nation's security increasingly depends on the availability and security of all of the IP networks. There are, and will be more-so in the future, special applications that will need to be run on customizable IP networks so that applications can be run securely and with minimal threat of intrusion. The importance of a company like BluegrassNet is that we are a resource as well as an alternative to big targets (such as the ILEC or Cable Company IP networks) should the application provider need a less conspicuous network to operate on. In fact, both of the large networks can completely be taken down, and independent ISPs can still operate on the broadband networks.

BluegrassNet is a member of the FBI Infraguard, plus the ISSA. As a local leader in network security and emergency resolution, the potential of losing the ability to run our own IP network over broadband transport could impede our activities as related to certain national security projects that we are currently involved in. At the current time:

- We have the freedom to use our independent IP network, and broadband nodes to develop, test, and implement activities for law enforcement agencies as requested. The experience that our engineers garner from dealing with attacks, viruses, worms, and other such events have built our company into a resource for the FBI, and other law enforcement agencies. It is dealing with these issues on a larger scale (i.e. a broadband network) that has allowed us to gain this valuable experience instead of relying on ILEC technicians who are generally inexperienced or not authorized higher level access to their own networking equipment needed to address problems of this nature.
- The possibility that there would eventually only be two broadband IP networks for the vast majority of businesses and institutions, makes the customers extremely vulnerable to IP related attacks and other malevolent activities. BluegrassNet has government entities that rely on our "not being tied" to mass networks to insure IP viability in the event of this type of problem.
- Department of Defense projects where the mission is to build network intrusion schemas based on practical experience and statistics that can ONLY be garnered by managing an IP network of thousands of active broadband nodes. The broadband access allows us to see how these new tools run in a real life situation. Loss of access to the broadband would deprive us of much needed raw resource.s

BluegrassNet Helps Deliver Competitive VOIP Service Platform: There are quite a few customers of BluegrassNet who are currently using VOIP services through communications companies such as Packet8, Vonage, myphonecompany.com, etc. While BluegrassNet does not run switching services such as these vendors do, the existence of our network gives local consumers the ability to choose other telephone companies independent of oversight by Bellsouth or Alltel (who are direct competitors of these VOIP vendors). Considering that there are only two broadband networks in Kentucky (the ILEC or the Incumbent Cable Company), allowing broadband IP networks to exclusively be delivered by these direct competitors to outside VOIP vendors would be a conflict of interest, and we are extremely concerned about onerous

network policies that would prevent end-customers from enjoying the fruits of competition. In other words, we are worried that the Cable Company or the ILEC will block independent VOIP traffic from their customers. We are very worried this will come to pass once the customers' ability to leave (ie Bellsouth.net for BluegrassNet) to access broadband is eliminated.

It can be pointed out that access to low-cost broadband transport has revolutionized the way a lot of businesses get things done everyday. This revolution has been initiated and implemented by companies like BluegrassNet, in conjunction with the deployment of broadband by the carriers or ILECs. Denying ISPs and other networking companies some sort of wholesale access at comparable rates to what the ILECs charge their own ISPs would be devastating, as these service events outlined above would no longer be possible. Innovation dependent on low-cost data transport networks would be put at jeopardy. Unfortunately, allowing forbearance that would cause BluegrassNet to lose access to reasonably priced wholesale broadband may cause loss of productivity for some businesses, and increase costs by forcing businesses to rely on more expensive T-1 and dedicated data transport lines.

### The Actual Forbearance Petition

While BluegrassNet sympathizes with the author of the petition, and his laments regarding his having to deal with regulatory law, we hardly consider regulatory hassle and some added costs (as outlined in this petition) as justification for whole-scale scrapping of the *Computer Inquiry* rules. Quite to the contrary, there are quite a few assertions made in the petition that we take issue with. On a macro-level, we find it wrong that the author holds forth what may be the market conditions in Atlanta, Georgia or Jacksonville, Florida, as what is going on in Louisville, Kentucky, or any of the smaller cities and 'hollers of Kentucky. In particular, here are some examples of sections we do not agree with:

On page 2, the petitioner asserts that the fundamental premise that "the telephone network is the primary, if not exclusive, means through which information service providers can obtain access to customers" is invalid in today's broadband market. The response to this assertion is two-fold: First off, the key word that seems to be missing is "reliable". While wireless technology is sometimes available, it is NOT reliable enough to be considered ready for business class services. Especially not in urban areas such as Louisville, Kentucky. This means that the only affordable broadband to rely on is the ILEC's ADSL. For example, in Louisville there are 19 BellSouth central offices, all of them are equipped with ADSL DSLAMs. A competitor, Covad, is only in 6 CO's. The cable company does not allow outsiders access to their transport component. Therefore, it can be said that the telephone system is the primary, and sometimes exclusive, means to get broadband information to customers. Furthermore, he also asserts that "the telecommunications network being the exclusive building block to perform information processing, data processing, and process control, and other enhanced services" is invalid also. A quick review of how BluegrassNet uses the telecom network above tells us that the telecom network is THE UNDERLYING FOUNDATION to the whole data networking experience! BluegrassNet has nowhere else to go to get broadband transport that is so important in deploying advanced data capabilities.

On page 3, the petitioner says "broadband service can be, and increasingly is being, provided over wireless, satellite, and power-line platforms." In Kentucky, that is not the case. While we have seen some mom & pop wireless providers emerge in the rural areas, they have tremendous difficulties in the open spectrums at this particular time, especially in regional Louisville, Kentucky. Not only has BluegrassNet attempted to run wireless, but our competitors here in Louisville have attempted the same thing, and up until this point, all have resigned themselves to the fact that there is too much interference and not enough reliability to make it viable for business purposes. Satellite has similar obstacles related to latency, and broadband over power is non-existent. So when it comes to broadband, BluegrassNet only has one feasible option: the ILEC.

On page 5, BellSouth estimates that it spends \$3.50 per customer per month in 2003 to comply with Computer Inquiry Requirements. Well if that is the case, then why do we pay \$33 wholesale, for something BellSouth.Net charges sometimes as low as \$19.99 retail? Shouldn't they be charging us \$19.99 + \$3.50? He also further asserts that "there is no market for that stand-alone tariffed service". Maybe he is talking about one particular offering they were forced to provide as outlined later in the document, but there is demand for their wholesale DSL transport service. BluegrassNet relies on it, as well as many other ISPs in the Kentucky region.

On page 16, the petitioner points out that Congress stipulated that the FCC shall forbear from applying any regulation or provision of the act if three criteria are met. Two of these events are (2) enforcement is not necessary for the protection of customers and (3) forbearance is consistent with the public interest, have certainly NOT been met. Since removing protection from access to broadband would hurt BluegrassNet customers, and would NOT be in the best interest of the public.

Page 19 has a statement that says "...even if all CLECs were driven from the broadband market, mass market consumers will still have the benefits of competition between cable providers and ILECs. In response, BluegrassNet asserts that there are no CLEC broadband providers in most parts of Louisville, Kentucky... or the rest of Kentucky for that matter, and once again, this entire petition only considers the "mass market consumers", not the business consumers that rely on BluegrassNet for enhanced Internet services.

Page 21 furthermore claims that Computer Inquiry rules affirmatively harm consumers by raising costs and impeding competition and investment as well as outline specific costs related to building and maintaining multiple ISP transport systems. Our response is that by NOT allowing ISPs to use the broadband transport layer you would be DIMINISHING competition at the IP layer, and what's more, the FCC would be diminishing service levels to consumers, especially on the IT consulting service events, that consumers would be forced to resolve through the use of hourly paid consultants instead. Thereby DRIVING UP the actual costs of staying on the Internet!

On page 29, the petition for Forbearance once again argues that Title II Common-Carrier obligations are null and void due to the fact that BellSouth no longer is the "market power" in broadband transmission. Once again, while this may be true as it relates to INTERNET ACCESS over broadband (due to the cable company selling a similar service), it is completely UNTRUE when considering broadband a "transport" service. Essentially, what BluegrassNet is saying is that there is NOWHERE that we can purchase universal, reliable, broadband transport, other than BellSouth Communications in Louisville, KY. While we can not attest to the validity of this statement elsewhere, in Kentucky that is the truth. With that being the case, BellSouth is the common carrier, and should remain under common carrier regulation until this market reality changes. In the same argument, BellSouth in a follow up on how much they need and rely on the assistance of the ISPs, says that even if the Common Carrier regulations were lifted, that they could not gouge, and over price the ISPs, since there is such a robust broadband market. The exact quote is: "... ILECs lack market power in broadband transmission, and they cannot charge unjust or unreasonably discriminatory rates. If ILECs seek to do so, consumers will simply choose other facilities-based broadband competitors". BluegrassNet's question is: "who?!" If you're talking about low-priced residential end-users, yes... they can go to cable. But that's it. What about the ISPs... where would we go? The answer: nowhere. There is no competition in broadband transport in Louisville, Kentucky... let alone most of Kentucky.

## Summary

It is our understanding that the purpose of the *Computer I* and *II* rules, plus the *Computer Inquiry* Rules, were designed to foster a technologically innovative and future thinking environment at the data networking level. In addition, these rules were implemented to address the inequity of unleashing competitors onto a market that have had their infrastructure (poles, wires, co's, etc) paid off vis-à-vis 70 years of government protection and 100% unfettered access to the telecom market. We certainly think that their dominance (both the ILEC and cable company) are strictly the result of not having to build a physical infrastructure to the last mile. While we occasionally see a wireless provider attempt to cover the last mile, more often than not, that wireless provider fails due to the unreliable nature of the technology, particularly in cities. This has left BluegrassNet in the position of relying on the ILEC's Broadband DSL as a reliable, cost effective way to move data between the end-user and BluegrassNet. At this time, we have no recourse but to stick with BellSouth, and hope that our access is maintained through technology friendly rulings of the FCC. If Computer Inquiry rules are dismissed, and BellSouth opts not to allow BluegrassNet continued access to the broadband network at a reasonable price, we will surely lose customers, because there are no reasonable alternative broadband options available at this time. In addition, those customers that continue to do business with us, will see rate increases of Internet access go from approximately \$70 per month for ADSL to \$500 per month for T-1 access to keep BluegrassNet as their Internet vendor. This will be about a 600% increase in cost to the end customers. Those customers that leave BluegrassNet because of this increase, would most likely switch to the ILEC's broadband, will most likely incur added expenses related to troubleshooting network problems, and loss of productivity as Internet/Network related problems require onsite consultants and employees to resolve what BluegrassNet did at no extra charge. Either way, if the forbearance of these rules takes place, and BluegrassNet is no longer allowed access to broadband transport at today's pricing, BluegrassNet believes that our customers will pay more. This will be the fact whether they switch to the remaining providers (ILEC or Cable) to keep costs low, or if they stick with BluegrassNet and have to switch to more expensive transport modes such as T-1's.

We are very concerned that the main arguments put forth in the petition of Forbearance are based on viewpoints that do not take into account: impact on businesses (particularly small businesses), the impact on uncommon Internet/broadband applications, regional market truths (such as the state of broadband in Kentucky vs. what is going on in Florida), and is generally limited in scope to the low-end residential price-driven consumer to the detriment of all other segments of the market.

Respectfully Submitted,

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