

December 20, 2010

Julius Genachowski, Chairman
Michael J. Copps, Commissioner
Robert McDowell, Commissioner
Mignon Clyburn, Commissioner
Meredith Attwell Baker, Commissioner
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

RE: Peering Representations by Comcast (NASDAQ: CMCSA); Comcast and NBC Universal Merger (MB Docket No. 10-56); Open Internet Broadband Industry Practices (GN Docket No. 09-191)

Dear Chairman Genachowski and Commissioners:

In recent letters to the FCC and supporting media activity (exhibit attached), Comcast represents to the Commission and general public that its ongoing dispute with Level 3 is “simply about peering”. Comcast explains that the issue centers around traffic ratios and its entitlement to financial compensation because, fundamentally, its network receives more traffic *from* Level 3 than it generates *towards* Level 3 – a position supported by “countless industry experts”. In reality, this representation is not accurate, nor is industry consensus unanimous.

Traffic ratios were commonly considered by networks seeking interconnection in the late 1990s, where much of the traffic exchanged was subsequently hauled large distances, with disparities in route-miles traveled and associated costs. In contrast, today, large access and content networks interconnect at a number of carrier-neutral collocation facilities around the country, where technical practices are employed to ensure that data is transmitted to an access network at the location closest to its requesting “eyeballs”. Whether an access network receives traffic at these locations by way of a peering, transit, or customer connection, Comcast’s costs and infrastructure requirements for hauling this traffic back to a subscriber’s residence remain the same.

Indeed, with the exception of Comcast, every major cable telecommunications provider in the United States has established peering relationships with large content sources, predicated on mutual benefit – such as improved reachability and direct capacity, where monetary settlement is not demanded by either party.

We the undersigned:

- a) acknowledge that we are Internet engineers, each with ten (10) years or greater of professional experience, involved in both peering and transit decision-making at our respective places of employment;
- b) believe that traffic ratios are an outdated and misleading metric for determining equality and financial burden, and are not commonly considered in "good faith" discussions between content and access providers seeking interconnection;

- c) believe in Settlement-Free Interconnection (SFI, or "free peering") as a technically and economically valid method of connectivity between content and access networks;
- d) would establish Settlement-Free Interconnection between our respective employers and Comcast, if Comcast were to support such connectivity on reasonable terms, and without regard for traffic ratios;

Sincerely,



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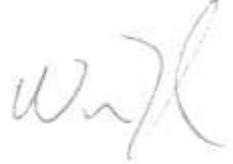
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EXHIBIT A – COMCAST BLOG

<http://blog.comcast.com/2010/12/20-qs---with-accurate-as---about-level-3s-peering-dispute.html>

as of December 9, 2010, at 5:35PM EST

20 Q's - with Accurate A's - About Level 3's Peering Dispute

Posted by [Joe Waz](#), SVP, External Affairs and Public Policy Counsel, in [Public Policy](#)

Last Friday, Level 3 issued 19 "Frequently Asked Questions" supposedly designed to "clarify" the issues in the Comcast/Level 3 dispute. They were certainly very good questions...but Level 3's "answers" did more to muddy the waters than to clarify anything about this dispute. What's worse, they seem to have been written with the goal of getting the government to regulate every aspect of the Internet like it used to regulate the Bell System -- something the Chairman of the FCC has clearly said he would never do.

We can certainly understand Level 3's motivations. That company seems to have cut a very bad business deal to distribute content. Level 3 is apparently (and understandably) desperate about having committed to carry large volumes of traffic at unrealistic rates that bear no relationship to the market, or to the costs any of its competitors bear. So it comes as no surprise that Level 3 is reduced to making self-serving arguments. Or that it is being blatantly opportunistic in trying to tie its bad deal to the discussion of an "open Internet."

But as we and countless industry observers and experts have said since Level 3 initiated this dispute last week -- Level 3's bad planning and rash business ventures are no reason to blow up ten years of well-settled traffic exchange practices on the Internet.

People watching this dispute should be asking the questions Level 3 posed, but getting clear and truthful answers. In that spirit, we offer the following responses, which have the benefit of sticking to the facts. And to give credit where it's due, where Level 3 has gotten it right, we say so:

Q1: What is the Internet?

Level 3's Answer: *The Internet is a communications system that is often referred to as a network of networks. It is useful to think of the Internet as being composed of three distinct pathways: (1) the very high-capacity, local "pipes" connecting large data centers (where content and applications like movies and software are stored) to the Internet backbone, (2) the Internet backbone itself, composed of the interconnected networks of a number of national and global Internet backbone providers, and (3) the local access networks connecting individual consumers and businesses to the Internet backbone. When a consumer downloads a movie, the movie exits the data center where it is stored and travels over these three segments until it reaches the computer or television where it is viewed.* We don't quibble with Level 3's most basic definition -- the Internet is in fact a network of networks. But what strikes us as odd is that Level 3 seems intent on redefining "the Internet" in a very peculiar way. Why? Because they seem to want to import interconnection regulations and pricing rules from the legacy telephone world circa 1996, and impose them on parts of the Internet and on certain Internet providers (but not, of course, on Level 3). How did those 1996-era rules impact the telephone network? They became the source of arbitrage, fraud, and intense litigation for over a decade, and did far less to promote competition than did the emergence of competitive cable and wireless networks that were not subject to such regulation. During the same period, the unregulated Internet has seen none of that turmoil. But now Level 3 seems ready to plunge the Internet into that kind of turmoil.

Q2: Explain more about the role Level 3 and Comcast play in connecting consumers to the Internet.

Level 3's Answer: Level 3 has its roots in providing connections to content and applications providers and in Internet backbone services. Level 3 also offers high-speed access to larger enterprises. These services are generally provided over fiber optic networks Level 3 owns. For a number of years, industry analysts have ranked Level 3 as one of the top two global Internet backbones in the world. Comcast started as a residential cable TV provider and also uses its network to offer local broadband Internet access to consumers. More recently, Comcast has begun offering local broadband Internet access to smaller businesses as well as Internet backbone services.

Level 3 isn't quite on the level with this answer. Level 3 desperately wants to define Comcast as mainly an "access" network, but that's like saying a baseball team is mainly the catcher. Comcast operates a nationwide multi-service high speed network with residential, business, and wholesale customers, and its operations include a very robust backbone network. Neither Level 3 nor Comcast serve only end-user "eyeballs." We have a range of commercial customers who use Comcast's network for transit across the Internet, including video content providers, Content Delivery Networks, software companies, web hosters, universities, town offices, local schools, smaller MSOs, and others. Indeed, Comcast and Level 3 are comparable networks with comparable costs.

Level 3 also isn't being honest about its own business. Yes, it's been a top Internet backbone, but its business plan has been stuck in neutral for years. By signing a big Content Delivery Network (CDN) contract with Netflix, Level 3 is obviously trying to shift its role on the Internet and its business model. That's fine -- it is perfectly free to do that. But Level 3 cannot then turn around and try to exploit peering agreements it reached with its Internet backbone hat on to push its new CDN costs onto everyone else. (For convenience, "Content Delivery (or distribution) Networks" generally mean companies that contract with content owners -- like Netflix and others -- and cache their content at computers placed at various servers throughout the Internet. For more, see http://en.wikipedia.org/wiki/Content_delivery_network.)

When Level 3 has been -- in its own words -- "one of the top two global Internet backbones in the world" and a provider of "high speed access to larger enterprises," it presumably transported a roughly equal balance of traffic in both directions (between different networks and to and from its own enterprise customers) consistent with industry peering practices. But since CDNs typically send far more traffic than they receive, Level 3 suddenly finds itself in a different business -- one in which its new job will consist almost entirely of sending traffic to other networks. That's it in a nutshell -- Level 3 wants to change its business, and therefore it wants to change the entire global framework of peering relationships to suit its needs. Now that Level 3 realizes it might for the first time be at the sending side of a traffic imbalance, it has decided that the rules of the game are all wrong. What a surprise.

Q3: Are the segments of the Internet competitive?

Level 3's Answer: This is a critical question since a central pillar of Comcast's argument is that competition exists throughout the Internet. This is not true. There is vigorous and active competition among Internet backbone providers. It is very easy for one Internet backbone to send its traffic across any number of other Internet backbones. It's a little like driving across the U.S. There are many routes you can choose to get from one city to another. Unlike the Internet backbone, there is limited competition when it comes to Internet access at the home or business. The local access connections are generally dominated by two providers: the local phone company and the local cable company. Both sets of companies generally developed their dominant positions by virtue of exclusive government franchises that protected them from competition. While Comcast and others talk about theoretical competition from broadband cellular or broadband over power line, for almost all Americans, broadband to the home means service from either the cable or phone company. Anyone who believes that broadband wireless is a substitute for the broadband access services provided by cable and phone companies should try connecting their cell phone to their TV to try to watch an online movie or TV show.

We don't agree with Level 3's assessment of competition for broadband services, and we've made that point, as have many others in the industry and numerous experts, in venues where it is relevant to

the discussion. But it is not relevant to our business dispute with Level 3. Because the backbone, the CDN market, and the Internet transit market are all highly competitive, a company like Netflix has hundreds of ways to reach Comcast's network and a Comcast customer. In fact, our customers get Netflix videos today through all sorts of routes that don't include Level 3, which is just the newest, and loudest, arrival on the scene. We'll discuss this more in the answer to the next question.

Q4: Is the disagreement between Level 3 and Comcast "just a good old fashion peering dispute"?

Level 3's Answer: *No. The dispute between Level 3 and Comcast is not a peering dispute, which relates to connection of Internet backbone networks. At issue is a fundamental interconnection disagreement between Comcast, as a provider of local high speed Internet access to consumers who pay Comcast for access to content, and Level 3, which delivers content to residential broadband access providers like Comcast in response to consumer requests. Unlike "peering" in the Internet backbone, where competition abounds and prices have been declining steadily, Internet carriers that have content requested by Comcast subscribers have no choice but to exchange traffic with Comcast. Comcast is using this dominant position to demand payment for traffic delivered at its customers' requests. You simply cannot "route around" Comcast to provide requested content to Comcast's subscribers.*

We hate to have to repeat the obvious, but as we and countless industry experts and observers have said repeatedly since this dispute broke, it is simply about peering. Here are just a few examples: <http://www.digitalsociety.org/2010/11/level-3-outbid-akamai-on-netflix-by-reselling-stolen-bandwidth/>; <http://arstechnica.com/tech-policy/news/2010/12/comcast-we-bent-over-backwards-to-help-level-3-those-bastards.ars>; <http://gigaom.com/2010/12/01/comcast-level-3-battle/>
In fact, even though Level 3 is now trying to spin its position differently in the press, the company told us numerous times that what it wants to talk about with Comcast (and others in the industry) is something Level 3 has dubbed "next generation PEERING" (which it seems to define as free peering for Level 3, regardless of traffic imbalance). Level 3's terminology just confirms that this is a good old-fashioned Internet peering dispute, just like the peering disputes Level 3 has had in the past, and it can and should be resolved on a commercial basis, just like every other Internet peering dispute (of which there have been very few) in the past.

Peering is the term used for exchanging traffic between two networks -- regardless of the type of traffic at issue. Every Internet backbone network (including ours) carries content that its customers want to deliver to customers on other networks, and that the customers of those other networks want to receive. There is nothing unique about video. For over a decade, Internet costs and payments have been funded by a two party system.

1. The Originator (Source) of traffic pays an ISP to distribute content to a destination.
2. The Destination of traffic pays an ISP to access and receive traffic from the origin.

If the traffic is roughly balanced, this is done on a "settlement-free" basis, on the premise that each party (Originator and Destination) has funded a portion of the end-to-end network costs. But when traffic becomes imbalanced with a peer, the network of the Originator ISP places imbalanced traffic, and an unfair cost burden of end-to-end network bandwidth, on the Destination ISP. Under those circumstances, the Originator's network pays the Destination's network, unless the Originator's network can bring the traffic back into balance. These network economics don't change based on the traffic that is requested or pushed -- whether it's video, audio, text, or any other type of traffic.

Level 3 now argues that these long-established principles should not apply, because "Internet carriers that have content requested by Comcast subscribers have no choice but to exchange traffic with Comcast." That's not true. Every provider -- including Level 3, right at this very moment -- has the option of sending traffic to Comcast by using one of the many transit provider networks that are available. Indeed, some of Level 3's competitors do exactly that -- they interconnect with us for some traffic, and they send traffic to us through other "transit" providers as well. Because the Internet is an

interconnected network of networks, there are literally hundreds of ways for traffic to get from any source to our network, through providers with whom we have all different kinds of relationships.

Does some provider, somewhere down the line, have to interconnect with Comcast, to get traffic to a Comcast customer? Sure. But it is equally true that if you want to reach one of Level 3's enterprise customers, you have to work through your own or a third party's direct interconnection with Level 3. In other words: there's no difference.

Q5: What is the difference between peering and interconnection?

Level 3's Answer: *Peering is one among many forms of interconnection between two Internet backbone networks. Traditionally, many peering agreements within the Internet backbone called for the exchange of traffic between communications networks without charge. Interconnection is a general term that applies when two communications networks exchange traffic, regardless of the commercial terms that are agreed. Since no network provider owns network everywhere or connects to every customer, interconnection is vital to all networks -- including the telephone network, the cellular networks and to the Internet. Impaired interconnection means impaired service. There have been periodic disputes about backbone peering that have been publicly disclosed. Level 3 was involved in one such dispute with Cogent Communications in 2005. Despite these disputes, Internet backbone traffic exchange has worked relatively well, with significant annual price declines over the past decade. In contrast to peering, interconnection disputes have been common, very public, and usually have significant implications for both the communications industry and for its customers. This point is further explained in Question 15.*

Yes, peering is a form of interconnection. But let's be clear: Comcast has *never* suggested it will not interconnect with Level 3. In fact, leaving this dispute aside, we *have* an ongoing interconnection agreement with Level 3 that is still in place -- where *Comcast* pays Level 3 for some services, like transit to other networks. **And as part of that agreement, Comcast and Level 3 already exchange roughly balanced traffic on a settlement-free peering basis. In fact, to accommodate Level 3's new request and carry some of Level 3's new traffic, Comcast gave Level 3 six brand new ports -- for free.** The only question now is what terms should apply to the tremendous number of *additional* ports Level 3 needs to more than *double* the traffic it sends onto our network.

Q6: Comcast states that the dispute is over peering and that "these agreements have existed for over a decade," implying that Level 3 wants to change well settled commercial arrangements. Is that true?

Level 3's Answer: *No. It is Comcast that wants to change the rules of the game. Comcast wants to use its local access network dominance as leverage to force Level 3 to pay for traffic requested by Comcast customers that already pay Comcast for access to that same content. Having sold broadband access services to its customers, Comcast wants to sell the same service again to Level 3 and other networks connected to Comcast. If the dispute were simply "commercial," the dispute would have already been settled or would never have arisen in the first place. Comcast's status as the nation's largest provider of consumer broadband service enables Comcast to force Level 3 to pay the "toll" Comcast has demanded.*

This is more rhetoric, not an answer. The Internet has long worked -- and worked extremely well -- on the basis that settlement-free peering makes sense where traffic is roughly balanced. (See, e.g.: <http://www.above.net/peering/>; <http://www.verizonbusiness.com/terms/peering/>; <http://www.corp.att.com/peering/> http://www.qwest.com/legal/peering_na.html)

And as just explained, there is nothing unique about Comcast that requires a sudden and radical adjustment to this longstanding framework. Level 3 *also* has a local access network, and, just like Comcast, it has customers trying to reach customers on other networks to send or receive traffic. In some situations, Comcast has content and CDN customers sending traffic requested by Level 3 customers, and in some cases, the situation is reversed. We'll say it again: So long as the traffic is in rough balance, this is not an issue; where it is significantly out of balance, settlement-free peering is not appropriate. That's true for *all* players on the backbone, and we're confident it is how Level 3 deals

with traffic destined for *its* network. To our knowledge, Level 3 has never offered unlimited, settlement-free access for anyone (including competitive CDNs) trying to reach Level 3's local access customers. (See Level 3's own principles, which refer to the parties' maintaining "an acceptable traffic exchange profile" in order to deviate from a typical paid transit relationship: <http://www.level3.com/index.cfm?pageID=415>). But with its new CDN business, Level 3 expects Comcast and other ISPs to work under different rules designed to benefit Level 3, exclusively.

Q7: Comcast contends that the fees it charges are commonplace and standard and it was surprised by Level 3's resistance. Is this correct?

Level 3's Answer: *No other broadband access provider in the U.S. is now charging Level 3 the type of fees that Comcast is charging. It is Comcast that seeks to change the common approach, changing the rules of the game in an unreasonable and discriminatory manner.*

Comcast works with global standards groups and network operator groups that define peering, so we are confident that our standards and policies *are* commonplace. And in the competitive Internet environment, where there are a wide range of transit and peering options, we also are confident that our fees are well within market range. Major backbone ISPs like Comcast and Level 3 sometimes have differences of opinion with respect to the terms of a specific arrangement, but these disagreements are generally resolved promptly amongst business and technical experts. And as we noted above, if Level 3 did not want to accept Comcast's standard and commercially reasonable proposal, it could have refused the agreement, and sent traffic to us up the limit permitted in our preexisting agreement, and then sought other paths for its remaining traffic. This video from the Digital Society blog helps to explain: <http://www.digitalsociety.org/2010/12/video-level-3-versus-comcast-peering-dispute/>.

Q8: Comcast says that Level 3 sends it 5 times the traffic that Comcast sends Level 3. Is that true? If it is true, why shouldn't Level 3 pay for the traffic it sends to Comcast?

Level 3's Answer: *It is true, and not surprising, that the traffic going to Comcast subscribers is much greater than the traffic coming from Comcast subscribers. It is also totally irrelevant to the issue of whether a broadband access provider like Comcast is entitled to payment of a toll. Comcast is attempting to transform the dispute with Level 3 into a peering dispute because, if it is successful in re-casting the debate, one of the traditional criteria for peering -- balance of traffic sent versus traffic received -- could be used to turn even the largest Internet backbone providers into paying customers of Comcast. Why? Because the vast majority of the traffic on Comcast's consumer broadband access network is requested by and flows to Comcast residential subscribers. This means that all of the traffic on Comcast's consumer access networks is and will be decidedly "out of balance" (meaning more traffic flows to Comcast than flows away from Comcast). This is true of any network that provides residential Internet access to consumers. When a Comcast subscriber, for example, wants to view a television show, sporting event or movie, the subscriber "sends" a very small request (in terms of bandwidth used), and receives back a very large amount of content. In fact, Comcast's service guarantees that Comcast will remain "out of balance." Comcast's offering provides residential subscribers with as much as 5 times the "download" speed (traffic going to subscribers) as "upload" speed (traffic coming from subscribers). Thus, Comcast knows that if it can apply a traditional backbone "peering" concept to this dispute -- that traffic must stay in balance -- Comcast stands to make many millions of dollars from Internet backbone carriers that bring requested content to Comcast for delivery to Comcast's subscribers.*

Level 3's answer is wrong. Comcast's backbone sends as much traffic out as it receives with our peer backbone

networks. See http://www.nanog.org/meetings/nanog47/presentations/Monday/Labovitz_ObserveReport_N47_Mon.pdf

In other words, our agreements with peers are balanced traffic-exchange relationships in which each peer places a similar burden on the other to carry the other's traffic. Until now, in fact, we had a roughly balanced on-net traffic ratio with Level 3. So it surprising -- and a major change -- that Level 3 proposes suddenly to more than *double* the amount of traffic it is sending onto our network, and send our traffic imbalance from roughly balanced (at 2:1) to closer to 5:1.

Companies that run CDN businesses based on delivering content have a responsibility to ensure that they have arranged proper capacity on the destination network to which their customers want to send that content; that's a critical part of the services Level 3 has contracted to provide to its customers. Capacity has a cost; it also requires proper planning and coordination by engineers on both sides of a send/receive request.

Q9: Comcast says that Level 3 wants to gain "an unfair advantage over its competitors by gaining enormous additional capacity at no expense to itself." Are they right?

Level 3's Answer: *Absolutely not. In fact, it is Comcast that is seeking an enormous, unfair advantage by using its dominance to get paid twice for the same capacity. For example, a Comcast customer might pay approximately \$45 per month for 15 megabits per second of download and 3 megabits of upload capability. Comcast states that "Our customers get access to all the online video they want, along with any other Internet content, application, or service they choose -- regardless of its source." Comcast's Network Management Policy states that "Use of the Service in excess of 250GB per month is excessive use and is a violation of the Policy" and reserves the right for Comcast to terminate service if this total is exceeded. If Comcast believes that the monthly payment is inadequate, Comcast can either lower the cap or charge more for higher usage as many other broadband access providers have already done. It is important to remember that Comcast's subscribers have requested the content delivered by Level 3, and that Level 3 must also add capacity as these requests increase. We try to charge our customers a fair price for the expense associated with meeting requests from Comcast's customers. We do not understand why Comcast cannot do the same, especially when caps and bandwidth limits are already in place.*

Absolutely so. Level 3's competitors in the CDN business send traffic to Comcast and other network providers through paid peering (or paid transit) relationships. Level 3 wants to compete with those companies, but get the same thing for free. Decide for yourself if Level 3 wants an unfair competitive advantage.

Q10: Comcast says that it is charging other companies that deliver video content to it for its subscribers. Comcast says that it is just treating Level 3 the same. Why should Level 3 get a special deal?

Level 3's Answer: *Level 3 can't confirm what arrangements Comcast has with other companies. But, as we all learned long ago, two wrongs don't make a right. Level 3 does not seek a special deal, but as in any interconnection between large networks, the terms and conditions of the interconnection must be tailored to the size and scale of the networks exchanging traffic. For example, it would be unfair to Comcast for Level 3 to interconnect with Comcast in only one location, forcing Comcast to carry large volumes of traffic around the U.S. for termination to its customers. But it is equally unfair, and far more disconcerting given Comcast's market power over its subscribers, for Comcast to demand that Level 3 buy service from Comcast on terms and at prices dictated solely by Comcast.*

See our previous answer. The bottom line is that Level 3 should *not* get a special deal: the type of favoritism Level 3 is seeking is *precisely* the type of discriminatory conduct that it is pretending to criticize.

Q11: What's wrong with Comcast trying to make more money?

Level 3's Answer: *Nothing, as long as the attempt is made in a competitive market. As pointed out above, Comcast is trying to use its dominance over residential broadband access to extract payments from companies like Level 3 that do operate in a competitive market, and that have no choice when responding to requests for content made by Comcast's customers but to route that traffic through Comcast.*

As we've explained above, the Internet backbone market is competitive, and Level 3 has options to reach customers of Comcast's network through many different routes and providers. That competition puts market-based pressure on the prices of all participants. So the real question here is whether there's anything wrong with Level 3 trying to make more money than its competitors by muscling through free peering for one-way, radically out-of-balance traffic and imposing all of its costs on others. To that, the answer is "yes, something's wrong."

Q12: What reasons would Comcast have for taking this action?

Level 3's Answer: *Comcast is a cable TV service provider. In addition to simply extracting monopoly profits, Comcast also has a strong motive to discourage competition with its cable TV service. Online distribution of movies, TV shows and other content threatens Comcast's traditional "closed" video distribution model. While Comcast disputes that the threat exists, press reports highlighting "cable cord cutting" (terminating cable television subscriptions and instead getting entertainment content online) confirm it is real. One industry analyst reports that about half of the content consumed by 18 to 24 year olds is downloaded over the Internet and is not delivered by cable or broadcast TV. Many parents with teenagers are intimately familiar with this trend.*

This is a red herring. Comcast *already* transmits a *huge* amount of Netflix content and the content of other online video providers to our customers. We did so yesterday, we're doing so right now as you read this, and we'll do so tomorrow. In fact, Level 3's competitors have been sending that traffic to us without incident, and *whatever happens* between Level 3 and Comcast, our customers will *continue* to be able to access Netflix and other video traffic from any source. To be absolutely clear: this dispute has nothing to do with the *type or source of content* Level 3 wants to send us -- it has to do with the fact that Level 3 wants to increase the traffic it delivers to our network to a total of *500 Gbps*, overnight, for free. That is an unprecedented, and outrageous, demand.

Q13: Comcast says this is all about Level 3's contract with Netflix. Comcast says that Level 3 bid too low expecting to get free interconnection, and now that Comcast has refused Level 3 is trying to salvage the deal. Is this only about money Level 3 might lose?

Level 3's Answer: *No. And it's not about Netflix or our agreement with Netflix. Rather, it is about preserving a free and open Internet. What Level 3 is concerned about is the precedent that Comcast's actions set, and about the longer-term implications on Internet openness and innovation. If, as Comcast seems to contend, there is no limitation on the terms and conditions that Comcast can demand for delivering content to their residential Internet access subscribers, then the terms simply become a tool to reduce competitive content available on the Internet. Development of new, innovative Internet applications, faced with an unknown and unpredictable toll that could be assessed or increased by any residential Internet access provider, would be chilled.*

Actually, it's Level 3 that says this dispute is about Netflix. They want to make it appear that we are objecting to the type or source of content they carry. We're telling it like it is: this is about Level 3 entering into bad business arrangements, and as a result demanding that we accept huge amounts of traffic from Level 3, for free. Our position, and our peering standards, are content-agnostic. And the peering standards we're asking Level 3 to live by are the ones that have governed the free and open Internet for over a decade.

Q14: Comcast claims that its subscribers still have access to all content on the Internet, and that it does not discriminate between types of content. How does charging Level 3 to deliver content disadvantage online providers of content including movies and TV shows?

Level 3's Answer: *Many customers already pay online providers for the right to stream or download video content including movies and TV shows. Comcast's customers also pay Comcast for a certain amount of bandwidth. If Comcast is able to use its dominance in local access to raise the price of competing content either directly or through Level 3, it can gain a relative price advantage for its own cable TV and online content. Comcast maintains that it does not "block" any lawful content. That statement is like asserting that a toll booth doesn't "block" traffic on a highway. Comcast seems to argue that imposing a "tax" on content -- in an amount determined by Comcast -- does not matter. As U.S. Supreme Court Chief Justice John Marshall famously said, "The power to tax is the power to destroy." Or, as one prominent industry executive has observed to Level 3, "If they can charge for access today, they can block access tomorrow."*

Level 3's "answer" is just bizarre. This dispute is not about what our end user customers pay for. This is about what Level 3 won't pay for. And the key question is whether Level 3 should force Comcast's customers to subsidize Level 3's costs as Level 3 goes into a new business as a CDN -- or, put another way, whether Level 3 should have to shoulder its own costs when it offers to haul Netflix's content around the Internet, just like every one of its competitors does.

Also, as we've explained above, the providers on both ends of a send/receive request have customers to serve. Both providers contribute to capacity needs on the Internet, and each has an independent responsibility to procure and deliver adequate capacity to satisfy customers' needs and provide for a well-functioning Internet. Suddenly, Level 3 is pushing the idea that every player has a responsibility to shoulder some portion of Internet traffic exchange costs -- except Level 3.

Q15: Comcast says that they know of no precedent for government intervention in a "peering dispute." Is this an accurate observation?

Level 3's Answer: *As explained above, Comcast's mischaracterization of this disagreement as a "peering dispute" is incorrect. In reality, this is a fundamental interconnection dispute between Level 3 and Comcast. The history of communications is filled with examples of regulators and the courts forcing dominant current or former government-sanctioned monopolies to interconnect with other communications networks on fair terms. Appendix A provides a brief summary of a number of examples of these important actions. More recently, when a local telephone company blocked broadband subscribers from accessing Internet telephone service that competed with its own telephone service, the FCC swiftly and properly acted to stop the practice. This action ultimately establishing the precedent for the FCC's Network Neutrality Policy Statement. It is not an exaggeration to say that absent forced interconnection on fair terms, traditional telephone competition, cellular competition and the Internet itself would not exist.*

Since this *is* in fact a peering dispute, as countless analysts and experts have already recognized, Level 3 is going to have to face up to the fact that it is asking the government to regulate the Internet, and specifically the exchange of traffic on the Internet backbone -- a successful marketplace that has functioned successfully and free of regulation for more than a decade. In fact, as we noted above, what it is proposing is to import the most heavily regulatory pieces of the 1996 interconnection regime into the Internet space. That is a terrible idea. It is also entirely unnecessary.

[Here's what one industry observer said](#) two years ago, writing about one of the handful of significant peering disputes that has ever occurred in the U.S.: "The current laissez-faire system has a remarkable ability to encourage privately run networks to voluntarily strike deals that benefit everyone, expanding capacity of the larger Internet while allowing everyone to connect to everyone else. In the rare instances where part of the Net does break down, as in the recent fight between Cogent and Sprint, the market provides overwhelming incentives to repair the breach quickly." That's still true.

Q16: Is the dispute part of the larger Net Neutrality Issue?

Level 3's Answer: *Of course it is, especially the FCC's policy that local access providers cannot discriminate against different kinds of content. As pointed out above, Comcast is using its local broadband access dominance to charge extra for content competitive with its cable TV and online offerings, even though the content is expressly requested by Comcast's own customers, using capacity the customers already paid for in accordance with Comcast's terms and conditions.*

Level 3 wants to wrap its campaign to shift its costs onto others in the flag of an "open Internet." That's insulting. As we just explained, what this is really about is Level 3's saying it wants the government to "regulate the Internet" by regulating Internet backbone peering -- which is exactly what the chairman of FCC has said he won't do.

And to be very clear, there is no "net neutrality" issue between Comcast and Netflix. There's no discrimination against Netflix content or any other type or source of content. Comcast delivers Netflix content to our end users all day and all night long, and there is no reason that our customers should see a disruption in their Netflix service no matter what happens between Comcast and Level 3. Netflix has many partners, as do we, and those partners are delivering Netflix and other online video without incident.

So let's call this what it is, yet again: it's a business dispute between Comcast *and* Level 3, which is

a transport provider, not a content owner -- over the commercial terms of their exchange of any and all traffic.

Q17: Is Level 3 asking the FCC or other governmental bodies to regulate the Internet?

Level 3's Answer: *Level 3 is not asking the government to regulate the Internet. We are simply asking appropriate government bodies to require Comcast, in its capacity as a residential broadband Internet access provider, to comply with the nondiscriminatory procedures that Comcast has historically complied with and is required to follow.*

We confess, we find this one hard to follow. Level 3 is asking "government bodies" to require Comcast to provide Level 3 with the right to deliver any traffic it wants, and as much traffic as it wants, to Comcast's network, for free, over the Internet (which they defined at the top of their document)...and with a straight face, Level 3 says it's not asking the government to "regulate the Internet." Level 3 finds itself coming and going because its arguments make no sense. In contrast, our argument is simple: this is a business dispute between two companies, and Comcast, at least, is committed to resolve it.

Q18: Comcast says Level 3 surprised it by going public in a last-minute effort solely to obtain commercial leverage over Comcast. Is that accurate?

Level 3's Answer: *No. When Comcast first made its demand for payment of a toll, Level 3 clearly communicated its objections. Level 3 also made it clear, in written communication to Comcast executives, that if Comcast persisted in its position, Comcast was leaving Level 3 no choice but to take steps to assure that the public and policymakers were fully aware of the issue. At the same time, Level 3 advised Comcast that Level 3 was willing to negotiate fair and equitable economic and technical terms to achieve a balanced interconnection arrangement, including offering to use the Level 3 fiber optic network to alleviate any potential congestion on Comcast's network. When Comcast said that it had limited amounts of equipment needed to provide the requested capacity, Level 3 offered to provide Comcast with this equipment. Rather than engage in an open dialogue, Comcast demanded that Level 3 execute its service order on a "take it or leave it" basis and said that if the contract was not signed within two days, the capacity would no longer be available.*

We invited Level 3 to a meeting on December 3 to discuss our commercial relationship; we even told them that we would not hold them to the deal they had entered into with us if we were able to work something else out. When Comcast commits to commercial negotiations with one of its partners, it gives those negotiations a fair shake. We expected the same of Level 3. Apparently we were mistaken. The meeting has been held. We hope to have more to say on that soon.

Q19: Why is the outcome of this dispute important to regulators, policy makers and most especially American citizens?

Level 3's Answer: *The Internet is almost universally regarded as an enormous engine of innovation that continues to generate fundamental improvements in social interaction, commerce, education and even politics. It has created whole new industries employing large numbers of Americans. The potential of the Internet can also be very uncomfortable and even threatening for those following older business models that have or will be displaced by the "creative destruction" spurred by innovative people at companies large and small. But this change is essential to maintaining our nation's long-term competitiveness. If incumbent owners of dominant local access networks are allowed to unilaterally impose additional "tolls" on content or applications requested by their subscribers over the Internet, it is not the current, established companies who are most at risk but rather the next great ideas which lead to the great companies of tomorrow.*

We agree with this first part of Level 3's answer, and that's precisely why it is so important that Level 3 not be permitted to unilaterally change longstanding practices on the Internet, especially outside the context of the domestic and international organizations in which the industry collectively resolves the principles that apply on the Internet. Level 3 has told us that its new vision of "next generation [read "free"] peering" should apply not just to Comcast, but *throughout* the Internet. In other words, Level 3 wants to throw out longstanding and established practices -- just like that, because they want to -- and hold the Internet hostage to save its own bad business deal and shaky business plan. But what it proposes would push its costs to Internet end users, adversely impacting broadband service costs for

all Americans, at a time when everyone agrees on the national mandate to make Internet services more affordable. Yes, this dispute is important -- too important for Level 3 to decide unilaterally. Level 3 did not ask a 20th question, but we will:

Q20: Will Level 3 abandon its quest to get the federal government to regulate the Internet, and instead come to the negotiating table immediately to resolve its bilateral peering dispute with Comcast?

We hope the answer is "yes."