Issues in ICC Reform – Part II

Level 3 Communications

Washington, D.C.

October 2, 2008

eco-friendly design version

© 2008 Level 3 Communications, LLC. All Rights Reserved. Level 3 Communications, Level 3, the red 3D brackets and the Level 3 Communications logo are registered service marks of Level 3 Communications, LLC in the United States and/or other countries. Level 3 services are provided by wholly owned subsidiaries of Level 3 Communications, Inc. Any other service, product or company names recited herein may be trademarks or service marks of their respective owners.

ISP Remand

- Previous ex parte sets out Level 3 view on legal basis to support ISP Remand
- ILECs, state commissions and courts have eviscerated the Order by requiring physical presence in the local calling area:
  - See ¶ 10: “end-user customers typically access the Internet through an ISP server located in the same local calling area”
  - This interpretation ignores how Internet calls have been historically provided
  - Resting compensation on ISP network design incents inefficient architectures
- FCC removed “local” from 47 CFR § 701 (a) to reflect elimination of physical presence requirement
- These decisions rest on policy contortions
  - Typically means “must”
  - Interstate means local

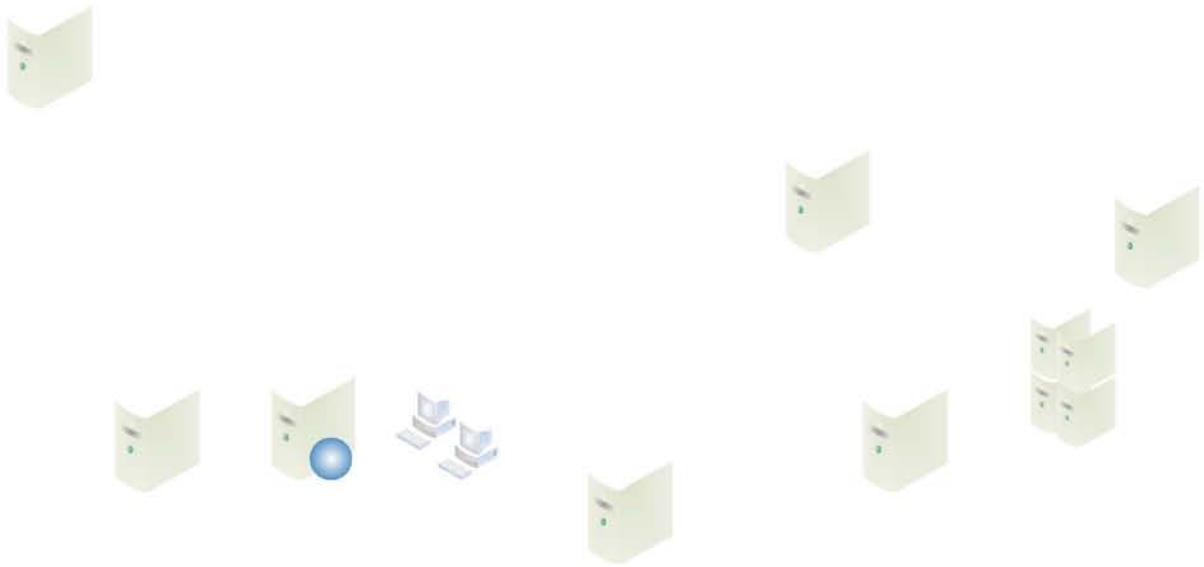
© 2008 Level 3 Communications, LLC. All Rights Reserved.

ISP Remand

- Decisions include a combination of access charges, bill and keep or .0007 depending upon a state Commission's view of the significance of legacy network variables such as the end user presence and interconnection architecture ie whether transport is established into originating carriers LCA or a single POI per LATA
  - Level 3 will file detailed ex parte on individual state decisions
- Under these definitions, less than 20 percent of all ISP-bound traffic remains under the Remand
- Contracts cited by FCC in original Order setting rate cap provided for compensation for ***all ISP bound traffic***. Contract language clear to include VNXX or FX type arrangements.
- FCC must clarify that all locally dialed ISP traffic was contemplated
- If not, the state-by-state Balkanization of ISP traffic as parties use FCC uncertainty as a legal basis to undo previous decisions
- Verizon, Earthlink *ex partes*

© 2008 Level 3 Communications, LLC. All Rights Reserved.

ISP Call Flows



This diagram illustrates a representative example of two ISP customers in Albuquerque, NM who are both customers of the same ISP and dial the same number to reach that ISP at the same time and then perform the same activities at the same time.

1	At 10am user dials his ISP and the network provider of the ISP accepts the call	At 10am user dials his ISP and the network provider of the ISP accepts the call
2	The network provider of the ISP communicates with the ISP's Server in Los Angeles, CA to validate the user's username & password	The network provider of the ISP communicates with the ISPs server in Dallas, TX to validate the user's username & password
3	The user checks his email for their Email Account which is supported by the ISP's Server in Seattle, WA	The user checks his email for their Email Account which is supported by the ISP's Server in Atlanta, GA
4	The user the shops for a book on purchases it online from a vendor who has a Server in Chicago, IL	The user the shops for a Music CD on purchases it online from a vendor who has a Server in New York City, NY
5	The user the checks their amount of Dial Up usage from the ISP's User Account Server in Washington, DC and ends their session	The user the checks their amount of Dial Up usage from the ISP's User Account Server in Washington, DC and ends their session

© 2008 Level 3 Communications, LLC. All Rights Reserved.

Interconnection Background

- Traffic patterns for telecommunications have radically changed over the past 20 years due to the growth of Wireless, CLEC, and VoIP Providers and the expansion of Broadband
  - As Verizon well documented in their September 19, 2008 ex parte, "The communications landscape has changed dramatically in the last decade and now bears little resemblance to the world Congress faced when it enacted the Telecommunications Act of 1996."[1]
    - Wireless subscribers number more than 238 million and a 28% percent of households either have no landline phone or use their wireless phone almost exclusively today
    - VoIP providers are expected to serve 31% of households by 2011
    - Traditional wireline access minutes (interstate and intrastate) have dropped from a high of 792B minutes in 2000 to less than 478B minutes in the 4Q ending June 2008
  - Majority of traffic no longer terminates on the ILEC networks
  - Thus, wireless, CLEC and VoIP Provider networks are architected around network efficiency, not artificial/outdated LATA or LEC Tandem architecture

[1] Verizon ExParte, *Re: Developing a Unified Intercarrier Compensation Regime, CC Docket No. 01-92; IP-Enabled Services. WC Docket No. 04-36; Universal Service Contribution Methodology, WC Docket No. 06-122* (September 19, 2008) at pages 5-9.

© 2008 Level 3 Communications, LLC. All Rights Reserved.

Interconnection Goals

- Carrier negotiated local interconnection, with the basic rules which are in place today, is functioning and the impact of changes to this environment should be well understood before enacted
  - Originating party pays to deliver local traffic, directly or indirectly, to terminating carriers
  - Default rules around financial and network obligations to interconnect for long distance traffic are clear
  - Carriers have the right to interconnect directly with ILECs
  - Non-ILEC carriers can directly interconnect when mutually beneficial terms are agreed to by both parties
- Changes to the current interconnection regime in the future should encourage network efficiency for all traffic types based on current and future traffic patterns and not impose unnecessary burdens to preserve legacy architectures
  - New rules for interconnection should focus on what incents the most efficient industry structure and should not be based on LATA boundaries which bear no real relevance to architecture or network cost for the majority of calls today
  - For many carriers connecting at a handful of interconnection points nationally is the most optimal
  - Consolidated interconnection for all types of traffic (local and long distance, originating and terminating) should be optimized as part of any new plan

© 2008 Level 3 Communications, LLC. All Rights Reserved.

Response to AT&T and VZ's Interconnection Proposal

- Several parts of the AT&T and Verizon proposal from September 12 are unclear and require additional industry discussion to fully understand their implications.
  - For example, the suggested changes to POI requirements pose a number of unanswered questions, among them:
    - How will these new rules encourage network efficiency for the industry today and in the future?
    - Do the POI rules discussed pertain only to local traffic or all traffic under the unified rate?
    - How do IXC POPs fit into this architecture?
    - Can any carrier request to interconnect at another carrier's POI regardless of traffic volume?
    - What scale of industry network change would be required to accommodate this POI proposal?
    - What is the cost of the near term network changes versus the long term network architecture – and on what basis is this short term cost to all carriers justified?
    - If network efficiency is not what is driving the POI requirements, what standards and enforcement mechanisms will be put in place.

© 2008 Level 3 Communications, LLC. All Rights Reserved.

Retroactive liability

- Current rule: No switched access for non-carriers
- Extending access to VoIP providers requires a rule change
- Rule changes can only be prospective
- Distinguishes this from *Qwest*

© 2008 Level 3 Communications, LLC. All Rights Reserved.

Asymmetrical rate structures

- FCC and states have authority to establish asymmetrical rate structures upon ***a showing*** of higher costs
- Important to maintain that ability as industry works through a unified rate structure
- Traffic stimulation or pumping occurs when a carrier with a higher rate structure attracts volumes of traffic that are outside the historic traffic volumes reflected in its original rate
- This practice flies counter to basic efficient economic principles that increased activity reduces costs
- FCC should adopt rule that anticipates costs will decrease when traffic increases outside historic traffic patterns:
  - If a carrier sees a 10 percent or more increase in a historic traffic pattern for access traffic for a specific month, then traffic volumes over the 10 percent cap shall be compensated at the reciprocal compensation rate pending approval of a cost study that establishes a rate.

© 2008 Level 3 Communications, LLC. All Rights Reserved.