Before the

Federal Communications Commission

Washington, D.C. 20554

In the Matter of	)	
	)	
Connect America Fund	)	WC Docket No. 10-90
	)	
A National Broadband Plan for Our Future	)	GN Docket No. 09-51
	)	
Establishing Just and Reasonable Rates for Local Exchange Carriers	)	WC Docket No. 07-135
	)	
High-Cost Universal Service Support	)	WC Docket No. 05-337
	)	
Developing an Unified Intercarrier Compensation Regime	)	CC Docket No. 01-92
	)	
Federal-State Joint Board on Universal Service	)	CC Docket No. 96-45
	)	
Lifeline and Link-Up	)	WC Docket No. 03-109

COMMENTS OF THE

COALITION FOR RATIONAL UNIVERSAL SERVICE AND INTERCARRIER REFORM

ON SECTION XV

Executive Summary

The specific issues raised in Section XV of this proceeding are individually important, but all are amenable to a single simple solution. A truly unified intercarrier compensation system, based upon Section 251(b) reciprocal compensation at cost and volume-based rates, would take care of them while leaving little room for uneconomic arbitrage. These issues only exist because intercarrier compensation rates are used for purposes other than compensating carriers for their efforts to deliver the call in question.

In December, 2008, when these issues were previously opened to general Comments, the Coalition for Rational Universal Service and Intercarrier Reform made detailed, specific proposals for a new intercarrier compensation system. We stand by these earlier Comments and suggest that they remain a valid solution that is both competitively neutral and economically efficient, while recognizing the higher costs of small, especially rural, carriers.

The Coalition for Rational Universal Service and Intercarrier Reform (CRUSIR) is a group of competitive service providers, urban and rural. Participants include

- Aero Communications, a regional multi-state CLEC based in Paducah, KY
- Telcentris Communications of San Diego, CA, a CLEC focused on VoIP innovations
- Nationsline, a Virginia-based multi-state CLEC serving residential and business customers
- PriorityONE Telecommunications, a CLEC serving rural eastern Oregon
- Ruddata, a CLEC providing voice and DSL in Paducah, KY
- AstroTel, a CLEC serving businesses in the state of Florida
- Quantum Telecommunications, a CLEC serving the greater Baltimore, MD area
- Raw Bandwidth Communications and Raw Bandwidth Telecom, an ISP and its data-oriented CLEC subsidiary based in San Francisco, CA
- Rystec, a CLEC serving rural Missouri from Branson
- United Systems Access Telecom, a CLEC in Kennebunk, ME
- Ionary Consulting, a Newton, MA consultancy that works with competitive providers.

Towards a unified system of intercarrier compensation

Our previous Comment in this matter[1] described a process by which all intercarrier compensation can be moved onto a single schedule, based on approximate cost, such that the price charged by a carrier to terminate a call would be based on the cost of carriage and delivery of the call from the Point of Interconnection to the destination, without regard for the origin or other classification. Originating access charges would be abolished, though fees could be charged for certain services such as trunking, Equal Access origination[2], and 8YY toll-free call origination (which would still be treated as termination).

In our 2008 proposal, which still represents our position, the termination charge for calls would be priced on a single graduated scale, applied to the *total* volume of calls of all types from *all* other carriers terminated by the billing carrier. We suggest that a standard termination rate schedule be established based on an industry-wide cost study. The incremental cost per minute of calls would go

[1] http://fjallfoss.fcc.gov/ecfs/document/view?id=6520188216

[2] Reciprocal compensation is paid on a sent-paid basis, while originating access is billed collect. We are agreeing with proposals that originating access be abolished. Rather than owe IXCs a reciprocal compensation fee for calls sent to them, an equal access service fee would offset the reciprocal compensation obligation and allow the call to be originated on a nearly revenue-neutral basis.

down with volume, so the lowest-volume carriers would have the highest call termination rates. Usage would be aggregated monthly on a market-area or state basis, such that a holding company with several small contiguous or nearby study areas would see them treated as one, but a company with subsidiaries in different parts of the country could treat them separately. This table shows an *example* of how such rates might be applied, using hypothetical rate levels in three rate steps:

Minutes/month above	Minutes/month to	rate per minute
0	500,000	$.01
500,000	10,000,000	$.004
10,000,000	(unlimited)[3]	$.001

The actual charge per minute charged to all carriers by the terminating carrier would be the average created by this table. For example, a carrier terminating 20,000,000 minutes in a month would charge $.00265/minute (computed as 500,000*$.01 + 9,500,000*$.004 + 10,000,000*$.001 = $53,000/20,000,000) as its unified rate for that month. An RBOC would simply charge $.001.

Call termination charges are rendered in arrears, so small carriers could adjust their rate monthly (or at some other short interval) to reflect the actual level of traffic delivered. This would replace the biannual readjustment of ILEC access tariffs, and would close current windows of allegedly-excessive revenue collection by carriers whose traffic suddenly increases before a tariff review. Likewise, a small CLEC that then grew a huge business on incoming modem calls (or whatever future application might generate that sort of traffic, should it occur) would see its terminating rate automatically fall.

We note that in several states (especially those of the former Bell Atlantic), intrastate Carrier Common Line access charges are currently rendered on an annualized true-up basis, such that a fixed sum of money is divided by the total number of chargeable minutes to produce the actual rate. Hence there is precedent for self-adjusting rates. Our proposal, of course, does away with CCL, and unifies interstate and intrastate charges (after a brief transition). In our unified rate proposal, the rate adjustment could be monthly, or quarterly, and carriers would make public the net rate charged over the preceding months, to enable connecting carriers to plan accordingly. These rates would be applied to *all* terminating traffic

[3] In the interest of simplicity, large carriers (say, >50,000,000 minutes/month using the example above) would only charge the lowest rate step (illustratively, .001). Thus the actual rate/minute for some large number of minutes approaching this should be lower than this step, in order to smooth the transition. This is similar to the way certain deductions are phased out in the Internal Revenue Code.

from *all* other carriers, unless alternative bilateral arrangements were made.[4]

Specific Questions in the Current Proceeding (Section XV)

We now apply this general principle to a number of the Section XV questions, in the belief that a unified, self-adjusting system such as our proposal will be the simplest, fairest solution and result in much less ongoing dispute and litigation than systems based on arbitrary classifications of calls, callers, carriers, customers, or applications.

Intercarrier Compensation Obligations for VoIP Traffic

We agree that the lack of clarity in current Rules creates difficulty for providers who may wish to create new, innovative services. A clear set of rules is required. But we do not think that the final Rules should distinguish between VoIP and other types of calls, except to the extent that actual cost may differ (for instance, cost-based port or transport charges). Indeed, the actual distinction between VoIP and other calls is unclear, as it is currently based on the exact location of the originating media gateway and perhaps on whether or not it is "nomadic". Even the definition of "IP" is in flux, and we would not want to see a situation in which competing protocols were given arbitrarily different regulatory treatment.

Hence VoIP should be integrated into a unified framework for intercarrier compensation, not called out for permanent special treatment. The guiding principle for pricing PSTN interconnection should be that a call is a call, a minute is a minute. Only during the transitional period, before the final rates take effect, should there be a distinction.

In 612, the Commission asks, "We seek comment on whether the proposed focus on interconnected VoIP is too narrow or whether the Commission should consider intercarrier compensation obligations associated with other forms of VoIP traffic, as well." If the call is not interconnected to the PSTN, then it should be treated as beyond the scope of this proceeding and indeed beyond the scope of PSTN regulation in general. Calls that do not leave the Internet are merely an application on the Internet and there is no rational basis for regulating them. *It is only at the Point of Interconnection to a PSTN carrier that intercarrier compensation, like other PSTN regulation, begin to apply.*

At 613, "…we also seek comment on any aspects of existing law that would need to be addressed to define an appropriate intercarrier compensation regime for interconnected VoIP traffic." By defining the intercarrier compensation regime as applicable to *all* traffic equally, as a cost-based charge for the specific usage of PSTN carrier resources, the legal ramifications are minimized. What happens on one

[4] For example, two carriers could agree to a bill-and-keep arrangement between themselves. But the rate they could charge to other carriers would be based on total traffic, including bill-and-keep minutes, not just billable minutes.

side of the POI, be it VoIP, TDM, wireless, or anything else, becomes irrelevant. So does the internal nature of the PSTN carrier network, as it is still providing a defined service for a defined price.

"In addition, we seek comment on how the various options below would be administered. For example, could terminating carriers identify interconnected VoIP traffic – as distinct from other traffic – for purposes of intercarrier compensation? Are there technical issues that would need to be resolved to enable a terminating carrier to identify whether traffic originated as VoIP?" This is no small matter. There is no reliable way for a carrier on one side of the country to determine if the media gateway on the other side of the country was at the customer premise, thus making the call potentially access-exempt, or in a wire center[5]. This arbitrary distinction is thus dependent on originating carrier "certification" that the call really is VoIP. This again creates potential for dispute and is not rational long-term policy. But no retroactive changes should be made to the status of these calls. Many CLECs have become the interconnection providers for the over-the-top VoIP industry, and retroactively applying access charges to these calls would likely result in the immediate bankruptcy of many of them. A new policy, which lowers non-VoIP rates until unification is reached, should be phased in on a going-forward basis.

We also note technical issues. Interconnection via Feature Group D trunks with Signaling System 7 is the norm for Switched Access traffic, and similar SS7 trunks are used for local interconnection, but the signaling used on VoIP trunks, such as SIP, does not always perfectly match these types of SS7 trunk. Flexibility should be afforded in technical requirements for interconnection, to allow new standards to evolve.

Rules to Address Phantom Traffic

So-called phantom traffic is an issue only because price distinctions are made between calls based upon point of origin. Unified intercarrier compensation that is based solely on cost to deliver from POI to destination, as we recommend, could not be "phantom", as origin would simply not be part of the price formula. Hence phantom traffic should be seen as a merely temporary issue, only significant until completion of the transition to a unified regime. We do note that many VoIP systems do not provide exactly the type of information that is routine in Signaling System 7 interconnection. SIP does not, by itself, attempt to duplicate PSTN signaling. When a VoIP call that originated in a distant LATA is handed off from a CLEC to another carrier in the same LATA for termination, is the local gateway or the originating telephone, or an intermediate gateway, the correct ANI? While the most obvious answer would be the originating telephone, the issue of re-origination of traffic, as it transitions from non-PSTN

[5] The nature and impact of this distinction was first noted by Commissioner Harold Furtchgott-Roth in his Dissent in the 1997 Report to Congress [FCC 98-067], who correctly predicted the rapid birth of a home VoIP adapter business.

VoIP to the PSTN, creates some confusion. Such arrangements also do not generally carry the Jurisdiction Indication Parameter (JIP), which is essentially the originating switch LRN. Fixing this in VoIP networks may be difficult, due to a lack of standardization, not to mention the difficulty in mapping the historic PSTN concept of “switch” to VoIP-originated calls. More rationally, such a set of revisions to VoIP signaling could take longer to define and implement than the time we recommend for transition to a fully-unified scheme, at which point it would not be necessary.

Rules to Reduce Access Stimulation

Here again a problem exists because the extreme complexity in the current intercarrier compensation regime creates opportunity for arbitrage. Unified rates should make the question of revenue sharing moot; it would simply not be relevant. Per-minute call termination rates would be based on industry norms; universal service subsidies would deal with exceptional cases. Access stimulation *per se* is not, however, necessarily a bad thing; sharing revenue with a service provider may well be the most economically efficient and consumer-friendly way of providing low-cost enhanced services, such as conference calling.

We take specific exception to the assertion [at 637] that access stimulation takes resources away from “more productive uses such as broadband deployment, and harms competition”. Access charges are paid by long-distance carriers, and in turn by callers. Broadband deployment is an entirely different industry, far more capital-intensive, and largely involves different participants. Furthermore, access stimulation is not anticompetitive, as it in fact provides some small carriers with incremental revenue that enables them to compete with larger ones.

“We invite parties to comment on whether there are revenue sharing arrangements that are in the public interest.” [at 660]. Many such arrangements are, in fact, in the public interest. “Free” conference calling services have become a vital tool for many users, who use it to collaborate on projects and hold virtual meetings. These services are able to operate on revenues well under one cent per caller-minute, a small fraction of the price charged by paid-use conference bridge operators. Indeed these services create a form of “micropayment” that is sadly impractical in our current financial system; explicit phone-bill payments themselves are costly and highly susceptible to “cramming” so they are not a valid substitute. The transaction costs alone of a paid conference service can be much higher than the total cost of free services.

Free and paid services are in totally different price ranges and address different markets. If free conference services were banned, then the bulk of the traffic would almost certainly move to the Internet, using free Internet voice (*not* interconnected VoIP) services such as Skype conferencing. Instead, these services provide an incentive for customers to purchase flat-rate long distance PSTN usage plans, whose retail profit margin is usually quite high, even with some amount of stimulated usage.

Hence the appropriate answer is to leave these services alone, but to reform the access charge rules that allow excessively high rates to be charged for these services. The unified-rate method we have described above, with frequent, automatic rate adjustments, would handle this. If traffic rose, prices would fall automatically. The current rules, allowing two-year adjustment windows and rule-shopping, are what invite abuse. Hence *no trigger is required*, and there is no need to create perpetual conflict over what is and isn't an acceptable business practice.

Proposed triggering mechanisms would potentially raise the question of what is and what is not access stimulation. A carrier's own services may be offered as a way to improve its traffic balance. Time-and-temperature services, for instance, have a long and dignified history. Are they access stimulation? What about the "dial-a-joke" services that began in the 1960s? What about call centers? If a call center is acceptable, would it still be acceptable if some of the agents were VoIP users off-site and their share of calls were thus transferred out of region? Bright lines are difficult to draw and value judgments are a risky substitute. Hence we propose *automatically* adjusting call termination rates based upon volume, without regard to the nature of the traffic *whatsoever*.

Treatment of CLECs should follow the same rule. Some IXCs today engage in "self-help" and simply refuse to pay any access charges to CLECs who provide *any* service that the carrier deems access stimulation (such as conference bridges). This practice is unjust and should not continue. Instead, CLEC termination rates should, after transition, be decoupled from the rates of the underlying ILEC, and instead keyed to the volume of traffic of that specific CLEC. A very small CLEC, typical of those in rural areas, might receive the highest rate, but if its traffic grew, its rate would fall.

"We also ask whether our proposals for comprehensive reform discussed above mitigate concerns about such activities in the reciprocal compensation context." [at 672]. Unified compensation should apply to all calls. This would include local, long distance, information services, mobile interconnection, VoIP, ISPs, and anything else that comes along. It should all be treated as reciprocal compensation, ideally under self-adjusting rates.

We also note that no current rule defines the rates owed by one CLEC to another. We have seen CLECs charge other CLEC switched access rates for *local* calls, on the presumption that absent a contract, all calls are governed by the access tariff. Again, unified rates should be applied to these calls too, though allowing the *option* of voluntary alternative bilateral arrangements, such as bill and keep. CMRS carriers too should be brought under this unified compensation rule, rather than remain a classified exception.

Respectfully submitted for the Coalition for Rational Universal Service and Intercarrier Reform

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