Before the

Federal Communications Commission

Washington, D.C. 20554

In the matter of

A National Broadband Plan for our Future	)	GN Docket No. 09-51
	)	
Broadband Data Improvement Act	)	GN Docket No. 09-47
	)	
Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act	)	GN Docket No. 09-137

COMMENTS OF THE
COALITION FOR RATIONAL UNIVERSAL SERVICE AND INTERCARRIER REFORM

Both Intercarrier Compensation and Universal Service are important subjects of pending Dockets before the Commission. The nexus between the Broadband Plan and Universal Service is obvious. The connection to Intercarrier Compensation is less obvious but indeed substantial, as the current "system" keeps parts of the industry in a time warp that clashes with the forward-looking nature of the broadband world, creating costly disputes with many broadband providers.

The Coalition for Rational Universal Service and Intercarrier Reform (CRUSIR) is a group of competitive service providers. We filed two Comments in November, 2008, in response to the multi-docket FNRPM of that month. Those Comments are still valid and are attached below.

In context of the current set of Broadband Plan questions, we have a few specific comments. We note that Universal Service funding should not be limited to voice service or for that matter to POTS providers, but we also see a need to continue funding in a manner that does not disadvantage smaller competitors. In a world of broadband services that are less and less like POTS, a funding mechanism based on telephone numbers makes even less sense than it may have in the past, and we continue to oppose it. We also stress that support should not be given for *information services* provided on a non-common-carrier basis, but for common carrier

services that can *support* competitive provision of information services. Placing a "network neutrality" requirement on recipients so that they provide what might be called a "fair and balanced" information service is not a substitute for an *open* network that allows many ISPs to compete for service across the same physical facilities. The Commission's mistaken Decision in CC Docket 02-33, detariffing DSL, should not be extended to monopoly recipients of USF, and should instead be reconsidered in its entirety.

Disputes over intercarrier compensation are indeed a major competitive weapon of the ILECs against competitive startups who, frequently, provide both voice and broadband data services. Companies are drained of resources by high legal costs of these battles. The broadband world is one in which distance is almost invisible. This stands in marked contrast to the current intercarrier compensation rules, which apply different rules and prices to a given connection depending on whether the distant *origin* of a call is classified as local, ISP, intrastate, interstate, VoIP, or wireless. Intercarrier compensation today is based on the obsolete premise that non-local calls are costly and that taking a higher fee for carrying part of them is a natural way to share their high revenues. This is further reason to adopt a truly *unified* intercarrier compensation system, one that is technologically neutral and, given the permanence of the "terminating monopoly", based on cost.

In response to the Commission's specific question, we are unprepared to provide a specific dollar figure or percentage figure on the size of disputes or their importance as a percentage. But these issues are always problematic, a business risk that limits market entry. Carriers have been threatened with a cutoff of their vital ILEC connections based upon such disputes, and the availability of acceptable interconnection agreements for new CLECs is often gated by "poison pill" clauses concerning intercarrier compensation. Hence this topic, which has been subject to an open Docket since 1991, should be a high priority of the Commission, as it does create barriers to broadband development.

Respectfully submitted this 7th day of December, 2009, by its consultant,.

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Attachment

Before the

Federal Communications Commission

Washington, D.C. 20554

In the Matter of	)	
	)	
High-Cost Universal Service Support	)	WC Docket No. 05-337
	)	
Federal-State Joint Board on Universal Service	)	CC Docket No. 96-45
	)	
Lifeline and Link Up	)	WC Docket No. 03-109
	)	
Universal Service Contribution Methodology	)	WC Docket No. 06-122
	)	
Numbering Resource Optimization	)	CC Docket No. 99-200
	)	
Implementation of the Local Competition Provisions in the Telecommunications Act of 1996	)	CC Docket No. 96-98
	)	
Developing a Unified Intercarrier Compensation Regime	)	CC Docket No. 01-92
	)	
Intercarrier Compensation for ISP-Bound Traffic	)	CC Docket No. 99-68
	)	
IP-Enabled Services	)	WC Docket No. 04-36
	)	
	)	

COMMENTS OF THE

COALITION FOR RATIONAL UNIVERSAL SERVICE AND INTERCARRIER REFORM

Introduction

It is undeniable that the Federal Universal Service Fund faces serious problems. Its costs have spiraled out of control, while the revenue base upon which the current fee is imposed is unable to keep up. Thus the fee, as a percentage of revenues, is rising. Nonetheless the Universal Service sections of the proposals now on the table (Appendices A, B and C of FCC 08-262) are mainly counterproductive. They fail on both the cost control and revenue recovery side.

On the cost side, they do too little to address the drain on the High Cost Fund by ILEC ETCs, instead proposing the draconian and anticompetitive elimination of CETC support. On the revenue side, they shift the burden from a properly neutral percentage-of-revenue basis onto one that divorces fees from both cost and value, which would likely put some competitive service providers out of business while benefiting the very largest incumbents. Neither numbers nor connections should be subject to fixed fees; the percentage-based USF fee structure should be left intact.

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 and around Sarasota, FL
- 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.

We will here address three key areas. These are Incumbent ILEC ETC costs, Competitive ETC costs, and the fee structure that supports USF. We strongly urge the Commission to defer adopting the Universal Service restructuring parts of any form of the proposed Order until these matters can be given further consideration. We are also filing a separate Comment on the related matter of Intercarrier Compensation, in which we will generally

concur with the direction of the proposed Orders (Appendices A and C) but suggest certain modifications, largely in the interest of clarity and completeness.

Incumbent LEC ETC costs

The three draft Orders on Universal Service take essentially the same approach, so we will consider these here as one. In particular, they do very little to address the High Cost Support given to Incumbent LEC ETCs. These ETCs are granted a monopoly on USF support, capped at current levels, in exchange for providing the social goal of "broadband"[1] Internet access service. A reverse auction mechanism is proposed for areas that do not have such a promise of Internet access, whose winner will be given the monopoly on support, with the hope that this will result in a lower support level.

In granting this monopoly, the clock is set backwards. Not only is the competitive support provision of the Telecom Act of 1996 effectively done away with, but, because ILEC ETCs are not subject to the same common carrier restrictions as ILECs of the pre-1996 era, especially *Computer II* and *III* protections, consumers are subject to monopoly harm at the information (enhanced) service level, as well as at the telecommunications (basic) service level.

In theory, the reverse auction can eventually produce a lower cost. But the most likely winner of a reverse auction will be the incumbent, since the incumbent already owns the plant in service. A new entrant would need to construct new plant to the entire study area, or speculatively bid with a hope of being able to purchase the plant from the losing incumbent. But the most likely incumbents to face a reverse auction would be those who have not yet received support for broadband access. These are likely to have relatively low levels of support, as some of the costliest of the High Cost Fund recipients have been those building out advanced services using uneconomical wireline technologies.

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[1] The proposed minimum rate of 768/200 kbps is barely competitive in today's world, let along going forward. However, we recognize that remote, rural areas often have much higher "middle mile" costs of Internet service. Because coping with these costs, and the impact of different applications on oversubscription rates, is at the heart of the "network neutrality" debate, a plan which monopolizes Internet *service* to a group of customers is necessarily going to result in considerable regulatory friction. We address this below by calling for a separation of carriage and content, so that different ISPs can find what may well be a set of different market-oriented solutions.

The draft Orders call for a single reverse auction winner. This would be appropriate in a purely-wireline environment, inasmuch as duplicate wireline plant is wasteful. We note, however, that wireless local loop technology does not have the same economic characteristics as wireline plant. The capital cost is more traffic-sensitive and the entry cost is lower. Thus it is conceivable that two or more companies could compete via this technology, without substantially increasing the total cost. Indeed, as competition has been known to sharpen the mind, wireless CETCs could conceivably lead to lower costs.

More attention needs to be paid, instead, to the *allowable* costs charged to USF by the ILEC ETCs. USAC clearly is not providing adequate review of expenditures. Companies are allowed to build costly plant with no regard for cost-benefit analysis, and with little regard for alternative construction scenarios. Does the country really need to spend $20,000 in capital plus hundreds of dollars per month in operating expense, per line, in order to provide Fiber to the Ranch? For that matter, does the USF really have an obligation to provide broadband or even traditional wireline service to individuals who choose to build new homes in remote areas, miles from an existing carrier's plant? This is in effect a subsidy to developers who engage in rural sprawl. While bringing affordable service to rural towns and farms is a laudable goal, to what extent are costly subsidies needed for vacation homes and other new subdivisions for the well-to-do? Other utilities and roads are not subsidized in the same way. Localities do not automatically bring a new road to any old isolated location that asks for one; developers often have to build their own streets.

ILEC ETCs are not encouraged to use wireless technology that can dramatically lower costs. While a few do make extensive use of radio technology to serve very-sparsely-populated areas (Sacred Wind Communications comes to mind as a rare example, as are the scattered users of BETRS), most prefer to install huge amounts of terrestrial plant, which adds to their rate base and to their USF payments. Some do so even though wireless options are already available. Border to Border, for instance, had provisioned both POTS and unlicensed, presumably

unsubsidized WiFi across its territory, but is spending millions of dollars to bring fiber to its several dozen subscribers (150 lines in the 2007 ARMIS report[2]).

We suggest that USAC or the FCC create an oversight committee to review all applications for support, to ensure that the network design that is being supported is not "gold-plated" or otherwise inefficient. While many rural carriers are indeed conscientious, the current system has incentives to maximize, not minimize, costs. In normal rate-of-return regulation, it is the role of regulators to decide what should and should not be allowable. Electric utilities cannot build power plants with abandon. State PUCs have little incentive to supervise IETC expenditures, since USF, not state ratepayers, are footing the bill. Hence USAC needs to take a far more aggressive stance. Before any major capital project is approved, the review committee should determine whether it is cost-effective, or whether adequate service could be provided at lower cost. Boondoggles such as Sandwich Isles would thus not be automatically approved.

We also suggest that the current support base levels be reexamined. Support is now begun when costs are at 115% of average. This comes very near the center of the curve, broadening the base of USF recipients, whose subsidized expenditures drive averages up. Perhaps support should begin at a somewhat higher level, so that only the truly high-cost areas are supported. Again, other necessities of life, including utilities, are subject to unsubsidized geographic variation; the 115% level picks up large numbers of newly-populated suburbs and exurbs, where support is not really needed. Many USF recipient ILECs charge lower monthly rates than urban unsubsidized carriers; this too is evidence that support levels are excessive. That is compounded by the fact that rural cooperatives not only get support, but pay dividends to their subscribers, often resulting in *net* rates that are well below those of the urban carries who support them.

Wireless technology needs to be encouraged

We parenthetically note that the Commission, at the plenary level, needs to coordinate spectrum policy with Universal Service requirements. In 2003, Ionary Consulting filed

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[2] Per the Commission's response to the House Committee on Oversight and Government Reform, http://oversight.house.gov/documents/20080728094935.pdf

comments[3] in WT Dockets 02-353 (AWS-1 rules) and 02-381 (rural wireless), suggesting that a fraction of the bandwidth of one of the AWS-1 licenses be set aside for rural wireless local loop use, at no charge, by ETCs. The license auction winner would have use of the entire license block in urban areas, where the need for spectrum is greatest, but would share the block with one ETC in USF-eligible areas, which, as a general rule, have a lower density of wireless service usage to begin with. If the ILEC ETC did not avail itself of this offer, then it would be offered to a competitive provider.

The AWS-1 Report and Order disparaged this Comment by misquoting it in ways designed to make the suggestions look impractical or illegal. This was a clear lesson in the "stovepipe" problem at the Commission: Universal Service is part of the Wireline Competition Bureau's mandate. Spectrum allocation is part of the Wireless Telecommunications Bureau's mandate. The latter bureau saw no reason to support the former. We again call upon the Commission to take a more holistic view of its policies, and how spectrum in rural areas could be worth more as a way to reduce USF costs than it nets in auction revenues. While "white space" may be of modest help, higher-powered licensed radio systems (especially WiMAX) would be a very useful tool for providing high-quality broadband voice and data service in rural areas.[4] The draft Orders do not permit spectrum costs to be charged to USF. The correct answer is that there should be spectrum made available at no charge, in order to reduce the cost of USF. The Commission should investigate a "carve-out" of spectrum from other services, if necessary, to facilitate this.

We further call attention to Sprint's proposal, the HCF Plan, which reduces High Cost Fund support to a much more manageable level, largely by consolidating Study Areas. This is a practical approach too, reducing support to the richest holding companies while providing support to the neediest. While we are not specifically endorsing or rejecting the HCF Plan in all of its details, this is an example of a pragmatic approach that we prefer to the current proposals.

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[3] http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6513406692

[4] BETRS provides POTS to a few outlying locations using analog transmission on UHF frequencies, but is obsolete and in any case inadequate for modern broadband applications.

Internet service is not an appropriate mandate; access to ISPs is

We also disagree with the proposed requirement that ILEC ETCs provide 100% "broadband Internet" coverage. Some of these areas are already serviced by independent ISPs, who have stepped in and invested money in providing the first service to high-cost areas. Providing ILECs with a subsidy to compete with them is bad enough. *Requiring* ILECs to take and use subsidy money to compete with unsubsidized providers is highly anticompetitive. This is also a fine example of where multiple ETCs in a Study Area would be beneficial. Sometimes the CETC could specialize in providing broadband services and the IETC could continue to provide POTS.

We also are concerned about the Commission's failure to distinguish between broadband Internet service with broadband *access to* Internet service. Internet service falls clearly into the category of Information Service as defined in the Telecom Act. The Universal Service Principles in Section 254 call for "Access to advanced telecommunications *and* information services" [emphasis added]. These are not the same thing. Universal Service funding should provide *nondiscriminatory access* to any ISP[5] that chooses to purchase access from the ETC. The actual Internet service should *not* be subsidized, but all ISPs should be accessible at subsidized rates. The draft Orders essentially create a monopoly on the dissemination of information. This would be akin to the Post Office's operating a publishing company and providing the sole newspaper that receives rural delivery service. The Commission has spent the past two years fighting battles over what should or should not be allowable as Internet "content", absent common carriage access to information service providers, and that is simply not a legitimate part of its mandate.

The cost of Internet service does not display the same economies of scale as transmission-related services. A small rural ILEC will generally provide its Internet service via a single point of aggregation, whether it has 100 or 10,000 subscribers. While independently operating an ISP with 100 subscribers would probably be uneconomical, a rural ILEC ETC could

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[5] By way of clarification, by ISP we refer to companies that provide retail Internet access to subscribers, assigning them IP addresses, and providing them access to Internet backbone services. We do not refer to content providers as ISPs, even though ILECs have attempted to obfuscate the issue in the past by using the term that way.

very easily provide its subscribers with access to existing ISPs, and even contract for private-labeled service from wholesale ISPs.

The largest cost to an ISP in serving rural communities is often the "middle mile" cost of transmission *from* an Internet backbone point (typically a major city) *to* the distant community. That element is often provided on a meet-point basis via third-party carriers. Subsidies may be appropriate for the IETC to provide "middle mile" links into its territory from a better-connected area such as a large-ILEC tandem site.

The Commission should also consider requiring *all* ILECs to provide all ETCs with cost-based interoffice facilities (e.g., at UNE rates), on a meet-point basis, in order to facilitate middle-mile access. At the present time, meet-point transmission is only provided under Special Access tariffs, whose rates are far above cost, a policy set many years ago in order to encourage facilities-based competition for interoffice transmission facilities. (CLECs who are eligible to purchase interoffice facility UNEs are still limited to end points within the operating territory of a single ILEC in a single LATA.) Certainly it is not reasonable to expect competitive market forces to hold down the cost of transmission facilities into every Study Area whose population density is low enough as to require High Cost Fund support. The current proposal has the perverse effect of requiring ETCs to pay supracompensatory rates to neighboring large ILECs, which could in turn become expenses eligible for federal high-cost reimbursement.[6] TELRIC rates are nonconfiscatory and should be the basis of these mandated middle-mile charges.

Competitive ETC costs

The draft Orders essentially do away with CETC support within any given Study Area over a five-year time frame. This is a rather draconian approach, an extreme overreaction to the alleged excesses of the Equal Support Rule. Allowing multiple ETCs to bid at a reverse auction for a monopoly franchise is a far cry from allowing end users to reap the benefits of competition.

The problem here is that facilities-based competition (that is, where "facilities" refers to loops and other transmission media, not inside facilities such as switching) is simply not a

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[6] The same is true for the Schools and Libraries Fund, which subsidizes the purchase of ILEC telecommunications services, largely sheltering the ILECs from market forces.

realistic option in a market where the cost of doing business is high enough to warrant subsidies. Today's CETCs are mainly CMRS wireless providers. That technology has a cost advantage over wireline service in low-density areas. It is likely that many or most of these CETCs could continue operating without subsidies, but that could hardly be assumed everywhere. There could also be CETCs set up to provide integrated cable, telephone, and Internet service in some rural areas using new, lower-cost optical fiber technology, or provide voice and data service via low-cost non-CMRS radios. We thus suggest two major changes in the way USF funding is distributed, which would substantially reduce costs without completely obliterating competition.

Limited CETC support should replace Equal Support

One simple change is to do away with the Equal Support rule and instead limit CETC support to those areas that are most in need of support *on a forward-looking basis*. The last-mile-related funds, High Cost Loop and Interstate Common Line, cover costs that tend to be constant over time. CETC support based on Local Switching, High Cost Model, the Safety Valves, and Interstate Access support can be eliminated. This change removes CETC support from a number of rate-of-return-carrier study areas, including almost all of the RBOC territories, where IAS is the dominant fund.

In the opposite direction, we would call upon the Commission to entertain limited CETC applications for new providers in non-USF study areas, in places where the ILEC does not provide broadband access service. This would typically apply to rural portions of Price Cap ILEC study areas, where the ILEC now has no incentive to upgrade service, or where many subscribers are outside of existing DSL coverage. (These areas often do not have cable coverage either.) Rural areas served by small-ILEC ETCs are more likely to have advanced services, as they do get USF support. By allowing a limited, cost-justified support to new CETCs, subject to case-by-case caps on allowable expenditures, these gaps in coverage can be filled at modest cost.

The current Equal Support rule is really a duplicated-support rule, as the incumbent who loses business to a CETC still has the expenses on its books, and is thus still compensated for them. We again call attention to the HCF Plan and its phasing down of subsidies to IETCs who lose a substantial share of their customers.

Support at the element, not service, level

A change that could help remove duplicative costs without preventing service-level competition is to change the way HCS funds are disbursed. At the present time, high cost support is used to lower the cost of retail services provided by ETCs. We suggest that the support be applied at the network element level instead. This would have no impact on retail rates or total ILEC ETC reimbursement, since the same support would be provided. But if a CLEC then leased an unbundled loop from an incumbent ETC, the rate charged for the UNE should be the forward-looking cost (no doubt high, since High Cost Support is required) *minus* that loop's share of HCL and ICL support. This would help CLECs provision both POTS and broadband and allow greater consumer choice in Internet services than under the current vertically-integrated model. It would also reduce the need for CETCs to request support at all, since IETC would keep its support, but its benefit would automatically be applied to the service leased by a CLEC (whether or not the CLEC is an ETC). This would also reduce demand for CETC support that today is used for facilities-based competition. In a high-cost area, *service-based* competition, provided above the level of the unbundled loop, is more practical than expecting competition at the physical-facilities layer, especially without support.

USF Fee Structure

The proposed Order includes a radical restructuring of USF fee collection. While the details differ slightly between the three different drafts, all apparently apply fixed fees to residential telephone numbers and business line connections, and some apply fees to business telephone numbers. This replaces or reduces the need for percentage-of-revenue fees. Instead it moves towards the telecom equivalent of a capitation, a highly-regressive poll[7] tax.

We strongly disagree with this changed approach. A more appropriate approach might be to expand the range of telecommunications services deemed "interstate", such as the safe-harbor share of CMRS revenues, which is still lower than the share of Interconnected VoIP revenues

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[7] Poll, in this case, is used in its original meaning "head". New Hampshire has no state income tax, but a few towns still have a poll tax of $10, which does not run afoul of the 24th Amendment as it is not tied to voting in federal elections; it is often now called a "Resident Tax".

deemed subject to USF[8]. While the percentages have been rising out of control, changing the way the money is collected does not change the excessive level of collection. Instead, it places the onus upon specific services, discriminating between different users on the basis of arbitrary factors, especially their consumption of telephone numbers. This is akin to lowering assessment-based property taxes by imposing a tax on windows, noting that costlier houses tend to have more of them than cheaper houses. London today still has some buildings with rather dark interiors as a result of that 1696 law, which led to the bricking over of many windows.

Assessable number is a weak surrogate for lines in service

The fundamental notion in the *residential* side of the proposal (and apparently business lines in one option) is to charge for "assessable numbers" instead of basing payments on a percentage of interstate revenue. This will be a fixed amount per month. This is roughly equal in consumer impact to simply increasing the Subscriber Line Charge by the same amount. Of course the pooling mechanism is different, but that goes on behind the scenes. In either case it's a fixed amount per month. But while the SLC is designed to recover the *fixed* cost of the loop, the USF fee has no direct connection to the payer's own service costs and does not go to the payer's own carrier; it is effectively a disguised tax, a way to have the federal government collect and disburse money without touching the General Fund. Thus the question that arises is one of tax equity. Is the rate fair, or is the rate set up to favor some payers and not others?

If one were to assume that there was absolutely no price-elasticity in the use of telephone numbers, and all telephone lines were equal, then the impact would be modest. But the power to tax (or, in this case, assess fees) is the power to destroy. A percentage-of-revenues fee has the least *structural* impact on the subjects being assessed. A per-number fee has disproportionate impacts on different types of user, based upon their usage of numbers. It would in fact make more sense to assess a fee *per line* per se[9]. This would at least allow telephone numbers, which

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[8] Wireless telecommunications is all jurisdictionally interstate, in contrast to state-certificated and regulated LECs. The fact that many calls are intrastate does not change this.

[9] This could essentially be seen as a pooling mechanism among all carriers' Subscriber Line Charges, raised by the amount required to achieve revenue goals.

are a *technical* construct, to be used efficiently. As proposed, they become a premium-cost item entirely out of proportion to cost.

We are *not* proposing a line-based charge, but are merely pointing out that a numbers-based charge is similar, except for the disproportionate impact on services that make unusually-heavy use of numbers. The current percentage-based method is fundamentally correct, and the only real problem is with the rate level, something that must be addressed on the expenditure side of the equation. If the idea is to charge lines, though, then one should charge lines, not numbers.

Numbers-based USF collections are not technology-neutral

A numbers-based Federal USF fee shifts the burden of USF from interstate services and their providers to intrastate services as well. Telephone numbers are associated primarily with intrastate services, including local exchange service and Direct Inward Dialing service. This is not competitively neutral. It also shifts the burden from the calling party to the party that *receives* calls, because telephone numbers are associated with incoming calls. This contrasts with the usual model of calling party pays.

The draft Orders take a curious view of being "technologically and competitively neutral". The current revenue-based scheme is both technology-neutral as well as competitively neutral. It has a modest impact on all interstate services, but never overwhelms the actual cost or price of a service with a fee that is even larger than the price of the service. Yet the actual cost of telephone numbers is in most cases *de minimis*[10]. While there have been studies of the cost of splitting area codes, that is no longer a common problem, and there are many vacant number blocks in most area codes and major rate centers. Thus the price of number-intensive services is often concomitantly low, in keeping with the economic efficiency principle of setting prices in line with costs.

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[10] Certain costs are associated with the opening of new NPA-NXX codes, and higher costs are associated with NPA splits. But states have largely moved from splits to overlays, which impose less cost. Furthermore, the rate of NPA exhaust has declined dramatically over the past several years, largely due to number pooling and, to a lesser extent, a decline in the number of landlines.

As Justice John Marshall has said, "The power to tax is the power to destroy." One problem with a numbers-based system is that it overwhelms the cost of various services that make use of bulk telephone numbers, what are sometimes referred to as Direct Inward Dialing (DID) numbers, potentially destroying them. Just looking at ILEC tariff rates, one can see the huge variation in the prices charged for DID numbers, sold as a supplementary service associated with telephone exchange service. For example, the Verizon-Massachusetts rate is $1.06/month per 100-number block, while the Verizon-Virginia rate is $20.25/month per 20-number block, almost 100 times as much. The proposed fee, whether $0.85 or $1.00 as estimated in the draft Orders, would roughly double the effective Virginia rate, but would be about a 10,000% increase in the Massachusetts rate. Competitive Local Exchange Carriers are major suppliers of DID services, and this would be yet another blow to an already-shaky industry. While some draft proposals do not impose this particular charge on business lines, it always applies to number-based services used by residential subscribers, which are particularly cost-sensitive. If applied to business DID blocks, then business PBX owners might see fit to discontinue DID service and move towards automated attendants, or even migrate more voice functions off of the PSTN.

Customers and services that depend on DID numbers would experience drastic rate shock. Some, particularly those who use DID numbers to provide enhanced services, might go out of business; others would find ways to operate that do not depend on NANPA numbers. In either case, the number of telephone numbers upon which this fee could be assessed will go down, and the goal of stable and predictable rates will not be met. The Commission would then have to either raise the TN rate, exacerbating the "death spiral" migration out of the NANPA, or find another source of revenue.

Facsimile services are a major user of CLEC DID numbers. They are enhanced services which use DID numbers to simulate fax machines, while using the Internet to deliver the received facsimiles to their intended recipients. Some fax services have millions of telephone numbers, many or most of them provided on a free basis, especially to residential accounts. They may also sell premium service for a few dollars per month, but many subscribers begin with the free level, which typically has a cap on usage before fees are applied. (For example, J2 Global's free DID-based fax service is limited to 20 pages/month; higher usage is either converted to a paid account or discontinued.) This business model is not impacted by a revenue-based fee; it is profoundly impacted by an extra dollar per month for a free service. Whether or

not this is counted as a “residential service” when used by consumers could potentially result in considerable litigation.

Voice mail services *not* associated with their subscribers’ LECs generally use DID as well, with customers’ calls forwarded to a hidden DID number. (The DID number is needed because there is no assurance that the customer’s carrier will provide the redirecting number when it forwards the call; it is thus inferred from the DID number.) These do not seem to quite fit into the exemption for numbers “used solely to route or forward calls to a residential number, office number, and/or mobile number”. An extra dollar could tilt the cost balance away from these competitive services and towards the LECs’ own, potentially leading to a rate increase from both.

Low-cost VoIP services make use of DID numbers to provide service. These retail today for prices beginning at less than $2/month. One Coalition member, Telcentris Communications, works with its affiliated VoIP business to provide a *free*, advertiser-sponsored, residential service (Voxox) that provides interconnected VoIP in conjunction with other Internet services. They will have to substantially raise prices to cover this fee. Advertising and other revenue can cover today’s percentage-based fees, but the proposed rate requires a considerable rethinking of a business plan into which a considerable sum has already been invested, and could require a considerable operational support infrastructure just to support the necessary charges. Even more conventional Interconnected VoIP Services have a relatively low average revenue per telephone number, and thus suffer competitively.

Raising the price of telephone numbers will also encourage non-interconnected or privately-addressed voice over Internet applications. Already the best-known such service, Skype, has millions of subscribers with private identifiers Some do have Skype-in DID numbers as well, but these can even be sourced overseas, or in Canada, and it is not central to the service. Wholesale calling rates from the United States to Canada are already lower than rates to some domestic points, so having a Canadian number is not a major problem. Will this proposed tax-by-another-name presage a wholesale migration to native Internet non-NANPA Uniform Resource Identifiers for voice calls? Will it deal a blow to ENUM, which fits telephone numbers into the Internet naming scheme? While the numeric keypad on handsets is a limiting factor for

incoming calls, the growing popularity of "texting" shows that many users are willing to handle alphanumeric identifiers on telephone keypads.

The fee is also regressive, as it increases the USF assessment on the lowest-usage residential subscribers while lowering it on heavy users. A home phone user who makes few interstate calls (such as a low-income or elderly person) will see little savings from a reduction in the revenue-based fee, but will pay the same fixed per-number fee as a business line that is intensively utilized. Thus the fee, expressed as a percentage of the total bill for the low-usage residential subscriber, will go up, as compared to the status quo. Given the resistance that the Commission already gets from increases in the *cost-based* SLC, imposing a non-cost-based fixed monthly charge on all residential subscribers seems to be a step too far.

A handful of large carriers benefit from the new proposed fee structure

One major industry sector that benefits from this proposal is CMRS; it is no coincidence that Verizon and AT&T are the largest CMRS providers and among the main backers of numbers-based USF fees. Commercial mobile radio services generally provide only one number per mobile phone, with carriers' average monthly revenues approximating $50/month per phone. The same number is used for voice and text messaging. As mobile phones gain capabilities and raise their average revenue per user, a numbers-based approach will save them money.

Another sector that benefits is interexchange carriage. IXCs do not use numbers (except 8xx and the like, which are generally high-value services) and bear a heavy burden of the current USF assessments. It again seems to be no coincidence that the two largest IXCs, AT&T and Verizon, have been strong backers of numbers-based USF.

Business line charges may be applicable to DSL

Under the proposed Orders as worded, DSL services could be subject to the $35 line charge for business Assessable Connections above 64 kbps. Even if it is not provided as common carriage (not required of most LECs, but still offered by ILEC ETCs and some CLECs), DSL may fall under the description, "An Assessable Connection is defined as an interstate telecommunications service or an interstate service with a telecommunications component that connects a business end-user's physical location (e.g., premises) on a dedicated basis to the contributor's network or the PSTN." This definition would seem to include all DSL services,

regardless of whether the transmission component is offered separately on a common-carrier basis, on a non-common-carrier/commercial agreement basis, or only provided as an integrated component as part of a retail broadband Internet service. Presently, only common carrier DSL transmission is subject to USF, at a modest percentage rate. Even cable modem Internet access would seem to be included in the proposed definition. The proposed $35 rate is roughly the price of a basic business DSL service itself, a 100% tax!

We want to be clear that this should not be fixed by removing the phrase "or an interstate service with a telecommunications component". Such a change exempts the largest providers from contributing, as they do not treat DSL as common carriage today, but would impede restoring common carriage to DSL, and would still apply the charge to those LECs who chose to offer DSL on a common carrier basis. The restoration of common carriage to ILEC DSL would be a clean way to achieve a goal of "neutrality" without regulating the Internet and should not be impeded.

Business connection charges are arbitrary

The fixed rate proposed for business services (specified as $5/$35 in Appendices B and E, unspecified in A and C) fails the sanity test, as it disregards the wide range of value that different business services might have. If all business services consisted of either a voice line or a T1 line, then the two numbers might have some correspondence to reality. In fact the actual range of business services is huge. Under the proposal, a SONET OC-48 circuit from Seattle to Miami, which no doubt would cost thousands of dollars per month in interstate carrier charges, would pay the same $35 fee as a 128 kbps IDSL local leased-access connection. This clearly undercharges the former ("leaving money on the table") and overcharges the latter to the point where it overwhelms the retail price.

This is the reason why so many taxes are assessed on a percentage basis. State sale tax collection entities do not spend time evaluating "television sets" vs. "dresses" vs. "footballs" to determine what tax to place on each; state sales taxes are set at a fixed percentage on very broad classes items which are deemed taxable. At the extreme, some purchases (real estate at the high end, food at the low end) are often deemed non-taxable, or subject to a different tax regime, but the broad majority of retail goods is taxed uniformly.

"Business" telecommunications service is extremely heterogeneous. A customer might subscribe to two DS-1 circuits or one DS-3; the latter is costlier and more valuable, but under the proposed plan, the former pays twice the latter's USF fee. And at the low end, the second telephone line provided from a cable modem[11], with a typical retail price of $12, which is used for low-value applications such as a fax machine, would pay the same $5 as a DS0 "WATS"-class line used by a boiler room for continuous outcalling. This violates common principles of equity, but also serves to discourage providers from selling low-revenue low-cost services such as these additional lines.

A fixed fee per retail Assessable Connection provides a windfall to long-haul carriers. For example, at the present time, an IXC leased-line circuit between two LATAs is typically provisioned in three legs. The IXC purchases Special Access from the LECs at both ends and provides the interLATA haul itself. USF is now charged on a percentage of the total price. Under the proposal, however, a Special Access circuit would only be an Assessable Connection if sold directly to an end user. Subsumed into a 3-leg interLATA circuit, the combined circuit would still be only one Assessable Connection. By combining smaller services into one larger service, then, the total contribution is reduced, compared to the current percentage-based system which collects a charge based on the total value of the final retail product. Where does a single Assessable Connection begin or end? The incentive is to combine as much as possible into one big Assessable Connection.

This is especially unfair to *de minimis* carriers. Their wholesale purchases from USF-paying carriers are essentially treated as retail purchases, so the total USF assessment arrives in piece parts, paid by each underlying carrier. Under percentage-of-revenue, the net impact is minimal. But under the proposal, a de minimis carrier piecing together an interLATA circuit from two Special Access legs and a third-party IXC leg would pay for three Assessable Connections, while a large carrier could sell them as one.

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[11] Unlike analog loop-based telephone lines, which require a costly local loop per line, cable telephone services are generally provided via an Embedded Multimedia Terminal Adapter (EMTA), which is a function of a cable modem. The typical retail EMTA supports two telephone lines, so the cost of activating a second line is *de minimis*.

AT&T, in an *ex parte* letters,[12] suggests a bandwidth-tiered alternative to the Assessable Connection charge. Rather than charge $35 for all circuits greater than 64 kbps, they suggest additional breakpoints at 25 and 100 Mbps. While it solves the DSL problem in the short term[13], it too is profoundly flawed. The value or even cost of a connection nowadays is not solely, or even primarily, based upon its peak data rate. Internet access services, for instance, are characteristically oversubscribed. A DSL or FTTH service may offer a high peak rate but assume a low average utilization. This is already manifesting itself in new broadband service provider pricing plans that have aggressively-low retail prices for very fast bit-rate burstable access, but with monthly byte caps and high-usage surcharges. Average bit rates are rising. Under AT&T's proposal, burstable high-bit-rate local access services would be discouraged, while costly long-haul enterprise services would pay even less: A transcontinental DS-3 circuit would only be assessed at $15/month (suggested as the 25-100 Mbps rate), while a much cheaper and heavily oversubscribed enterprise Gigabit Ethernet local connection would be assessed $250/month. It would slam the brakes on the deployment of high-bit-rate, burstable aggressively-priced local access services.

The per-connection charge also creates new risks and confusion, not clarity, when assessed against innovative new services. While the historical market is based on simple services such as analog telephone lines and discrete leased-line circuits, the assessment of USF fees becomes clouded when applied to new packet-based voice services. Some services that combine processing and telecommunications, such as network-based automatic call distribution, do not have a 1:1 correspondence between numbers, users, simultaneous calls, and network connections, especially in a packet environment. Discrete quanta such as "trunks" and "lines" may be subsumed into a network of servers that assist users, in multiple locations, in handling calls expeditiously and flexibly. To the extent that these involve an interstate telecommunications component (which is undeniable), a percentage-of-revenue fee is by far the

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[12] Letter from Mary L. Henze, AT&T, to Marlene Dortch, FCC, WC Docket No. 06-122, CC Docket No. 96-45 (filed Oct. 28, 2008) (October 28 ex parte letter).

[13] Exactly how this would be applied to the new bonded-DSL services such as Ethernet in the First Mile (EFM), which allows DS3-rate services to be created out of several DSL loops, is unclear; again, a revenue-based approach would not have the definitional disputes of the proposed capitation.

simplest option. It is technology-neutral and does not require a hermeneutic parsing of a complex service into discrete quanta. The proposed numbers-and-connections fees, on the other hand, are based on historical TDM network technical constructs, and applying them to new services is likely to result in prolonged confusion and potential litigation.

There is not "almost complete unanimity within the industry"[14] that percentage-based fees should be replaced. The two largest long distance carriers, AT&T and Verizon, do agree that they should bear less of the burden than their smaller competitors; we strenuously disagree. This change invites gaming of the system. It is not predictable, and it is not just and reasonable.

Conclusion

The existing High Cost Fund needs to have its costs controlled, but the proposed mechanisms are not appropriate. Access to the Internet, if subsidized, should be on a common carrier basis available to access a choice of ISPs, not a subsidized information service. The Incumbent ETCs should be subject to stricter controls, including a cost-benefit evaluation of especially high-cost projects. The identical support rule should be modified, but Competitive ETCs should be allowed to receive some support. The proposed numbers-based and capitation-based fees are entirely inappropriate. The basis of USF collection should remain a percentage of revenue.

Respectfully submitted this 26th day of November, 2008, by its consultant,.

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[14] AT&T Letter to the Commission, Nov. 21, 2008, http://fjallfoss.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6520187462

Before the

Federal Communications Commission

Washington, D.C. 20554

In the Matter of	)	
	)	
Developing a Unified Intercarrier Compensation Regime	)	CC Docket No. 01-92
	)	
High-Cost Universal Service Support	)	WC Docket No. 05-337
	)	
Federal-State Joint Board on Universal Service	)	CC Docket No. 96-45
	)	
Lifeline and Link Up	)	WC Docket No. 03-109
	)	
Universal Service Contribution Methodology	)	WC Docket No. 06-122
	)	
Numbering Resource Optimization	)	CC Docket No. 99-200
	)	
Implementation of the Local Competition Provisions in the Telecommunications Act of 1996	)	CC Docket No. 96-98
	)	
Intercarrier Compensation for ISP-Bound Traffic	)	CC Docket No. 99-68
	)	
IP-Enabled Services	)	WC Docket No. 04-36
	)	
	)	

COMMENTS OF THE

COALITION FOR RATIONAL UNIVERSAL SERVICE AND INTERCARRIER REFORM

Introduction

The proposed Orders on intercarrier compensation are an important step forward. The move towards a unified system of compensation, rather than one that depends on an arcane and increasingly unsupportable set of classifications, is overdue. We therefore support many of the principles in the proposed Orders. However, we find flaws with certain details, notably the way the "edge" is defined, and find critical omissions that require clarification if the entire system is to avoid sinking into the same web of eternal litigation as has plagued the status quo. We thus will

suggest clarifications to the text and solutions to these omissions. We also suggest an alternative means of setting the unified intercarrier termination rate for individual 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 business in and around Sarasota, FL
- 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.

We are also filing a separate Comment on the topic of Universal Service, in which we strenuously disagree with the proposed changes in rate structure and request that action on that topic be deferred for further consideration. These two subject areas can be decoupled, so that Intercarrier Compensation reform can proceed more rapidly.

Transport costs need to be clarified

The draft Orders focus on call termination rates. Intercarrier compensation for switched services is really divided into two categories, termination and transport. The draft Orders are very short on detail on how the transport aspects should be handled, and to the extent that it is bundled into termination. But the price of termination is secondary if the price of transport is insufficiently

specific. The incremental cost of the local switching capacity used to terminate a call is certainly relatively low today, compared to the past; that is however only one element of the actual cost.

The intent of the proposed Order is unclear because of ambiguous wording about what transport is bundled into the termination rate. This problem could be simply solved by clarifying this sentence in the proposed Order. As worded, it states "The called party service provider must either permit interconnection at its edge for purposes of exchanging traffic with the calling party service provider or provide transport at no charge to that edge from a location in the same LATA where it does permit such interconnection." This could be interpreted as giving the called party, which could be an ILEC, the choice of whether or not it wishes to provide transport to the tandem, even if it is an ILEC with facilities near the CLEC. Here is one instance where symmetrical treatment between ILECs and other carriers is not appropriate. ILECs, not other carriers, have ubiquitous transport networks throughout the LATA. Thus the appropriate wording should be, "The called party service provider must either permit interconnection at its edge for purposes of exchanging traffic with the calling party service provider or, *if it is an Incumbent LEC,* provide transport at no charge to that edge from a location *of the originating carrier's choice* in the same LATA where it does permit such interconnection." [Emphasis added] This wording emphasizes the LATA-wide nature of the transport obligation.

That rule is needed for competition to be practical for all but a few CLECs. The ILEC "edge" as proposed is usually at the tandem switch serving a set of subtending end offices. In such a case, transport *from* the edge *to* the end office is bundled into the proposed price of termination. But transport from a non-ILEC to the ILEC tandem "edge" is a very real cost. ILECs determine the location of their own tandems. With rare exception in the most remote areas, ILECs maintain fiber optic transport networks amongst their switches, connecting end offices to the tandems. The *incremental cost* of DS0 (voice) calls, or for that matter of DS1 trunks, on these networks is very low. The TELRIC cost is also low, given that the price of fiber optic transmission gear continues to decline.

In any case, the distinction between edge and POI seems counterproductive. In particular, if transport to the edge is not included as we recommend above, we object to the draft Order's wording that defines edge for a destination that "…subtends a tandem switched owned or controlled by the called party service provider, in which case that tandem is the network edge for

that call." This moves the POI (edge) in all cases *to* a tandem location, even if it is currently, as allowed, elsewhere within a LATA. This is nonsensical for small carriers whose service areas are not near the location where the ILEC placed the tandem, and it is nonsensical to require an ILEC to transport all calls to or from an edge when many or most could be handled locally.

For example, Coalition members Aero Communications and Ruddata are both located in Paducah, Kentucky, and they exchange significant traffic with AT&T (BellSouth) there. Under the proposal, the edge would have to be at the AT&T serving tandem, in Madisonville, approximately 60 miles away, and, depending on how the transport cost rule is interpreted, Aero and Ruddata would be potentially responsible for purchasing transport to get there. At that point AT&T would take its direct end office trunks and groom them back to its Paducah switch. This "hairpinning" makes no sense. AT&T's cost of transport is very low, compared to what most CLECs pay; the CLECs should be permitted to keep POIs in Paducah, from which trunks can be groomed to local end offices and tandem switches at the called party's discretion. This is, in fact, common practice today, at least for the handling of local calls. These POIs would also function as the CLEC edges.

Similarly, if our clarification of the transport obligation is *not* the Commission's intent, then we are concerned that while it has been generally understood that 47 U.S.C. § 251(c)(2)(B) permits CLECs to have a single POI with ILECs in any given LATA, the proposed "edge" reduces the scope of interconnection from LATA to tandem serving area. Thus a LATA with multiple tandem sectors could require multiple POIs. This change would be highly anticompetitive, as it would require CLECs to establish additional POIs. It would be especially anticompetitive if the transport components were charged at higher than cost-based rates.

In practice, only a few of the largest CLECs have their own transmission facilities into multiple ILEC tandems. Under current pricing regimes, the price of this transport is variable. To the extent that transport is purchased from an Access tariff, the price is generally much higher than TELRIC. Such prices are, like other aspects of the Access regime, based to some extent on historic values, to some extent on a loading of common costs, and are to some extent simply arbitrary values selected to arrive at a desired goal, such as minimizing the "1FR" basic line price by extracting monopoly profits from other services. Many areas lack sufficient competition to provide CLECs with alternative "market" rates.

Entrance facilities are still required

When a CLEC does not own its own transmission facilities from its own switching location into the ILEC network, it may lease entrance facilities from the ILEC. If the entrance facility (portion within a serving wire center's distribution area) is not in the same wire center's distribution area as the selected Point of Interconnection (POI), then the CLEC may generally lease those interoffice facilities from the ILEC. That is currently subject to Section 252 interconnection agreements, whose terms are inconsistent. In some cases these are provided pursuant to Access tariffs, even though they are not cost-based. In some cases they are provided at TELRIC rates, to the extent that they are used for "local" calls. But in almost every case, ILEC facilities provided to CLECs for interconnection purposes are subject *pro rata* to Access rates to the extent that they are used for Switched Access calls. Certainly if termination rates are to be unified at a cost-based rate, then transport rates should not be at higher rates.

We also seek clarification that entrance facilities should be made available by ILECs at a cost-based rate (e.g., TELRIC). Again, this is available in some interconnection agreements but not others, and the price differential approaches an order of magnitude. In the 2003 *Triennial Review Order*, the Commission removed entrance facilities *for purposes of backhaul* from the mandatory UNE list. Some ILECs have taken this to apply to interconnection trunk entrance facilities as well.[15] While some state Commissions have rejected this in arbitration, the Rules should be made clear enough so that costly arbitration is not necessary.

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[15] The SBC Interconnection Agreement boilerplate in 2004 stated,

> 5.1 Should SBC-13STATE wish to voluntarily provide CLEC with Leased ILEC Facilities for the purpose of interconnection, the Parties agree that this voluntary offering is not required under FTA 96 nor under FCC UNE Remand Order 99-238, November 5, 1999, and is made with all rights reserved. The Parties further agree that any such voluntary offering is not subject to TELRIC cost methodologies, and instead will be market priced on an individual case basis. Should SBC-13STATE voluntarily offer Leased Facilities under this section, it (I) will advise the CLEC in writing in advance of the applicable charges for Leased Facilities, and (II) will process the request only if CLEC accepts such charges.
>
> 5.1.1 Leased facilities in SBC MIDWEST REGION 5-STATE and SBC CONNECTICUT are obtained from the applicable Access Tariffs

Current version of the AT&T Inc. (ex-SBC) boilerplate no longer contain such language, and include no offer of leased facilities, but in practice AT&T Inc. permits Special Access circuits to be leased for interconnection purposes.

Transit obligations should be defined

The proposed edge concept makes the network edge a non-tandem switch (end office, MSC, POI, or trunking media gateway) when the destination carrier is not the owner of the tandem which the end point subtends. Calling parties *may* utilize the services of third carriers to reach these edges, but the price of such tandem transit is undefined. This creates an untenable situation in many areas, especially rural, where one ILEC owns the tandem and one or a few nearby urban end offices, and another owns the surrounding end offices. For example, in LATA 360, Verizon-North has four host switches and nine remotes subtending the AT&T Rockford tandem. All are within the Rockford retail local calling area. It would be highly uneconomical for a CLEC to need interconnection with all four hosts in order to establish local connectivity within a LATA. In LATA 360, the tandem owner itself only has three host switches in the LATA. This is not an uncommon arrangement. Often a "Bell" AT&T Inc. tandem is surrounded by ex-GTE or other non-Bell end offices.

Thus the rate for tandem switching and transport to third parties (collectively, transit) must continue to be regulated at cost-based levels, albeit levels that allow the transit operator to make a fair profit. (TELRIC is thus a reasonable option.) While there may well be a market for competitive tandem switching in many top-tier markets, this primarily exists to support CMRS carriers, and rarely extends to rural markets (such as Rockford) where "donut" ILEC patterns exist. This transport obligation should apply to all carriers, ILEC and non-ILEC, who subtend an ILEC tandem.

Non-ILEC interconnection defaults should be explicit

Under current rules, toll calls to CLECs from other CLECs are subject to the same Access tariffs as calls from ILECs, but the status of local calls is ambiguous. CLECs are allowed to enter into interconnection agreements with each other, but in practice such agreements are far from universal. Interconnections with CMRS carriers are subject to different rules and they too need to be accounted for. We therefore consider the draft Orders to be incomplete in that they do not explicitly provide default termination rates for all combinations of called and calling carriers. CLEC-to-CLEC, CLEC-to-CMRS and CMRS-to-CMRS termination rates should, by default, be mirrored at the unified rate of calls to and from ILECs. (ILEC transit carriers should still be

allowed to charge cost-based rates for services rendered.) However, if such companies choose to enter into a bill-and-keep or other bilateral agreement, this should be acceptable.

Phantom calls are at most a temporary issue

We concur with the draft Order's statement that we believe that "the comprehensive compensation reforms we adopt today should significantly reduce service providers' incentives to mislabel traffic or otherwise to try to avoid their financial obligations". A proper intercarrier compensation strategy should make the source of the call irrelevant in determining the rate paid. Efforts to reduce what some have called "phantom" calls are thus a stopgap measure at best. The remaining long-term issue would be *whom* to bill for calls.

At present, calls are billed in a complex bilateral fashion. Tandem operators are not responsible for paying termination charges of calls that they send on behalf of third parties (transit). But once rates are unified, if tandem operators are given the responsibility to pay for all calls that they deliver, including third-party calls for which they are the transit provider, then they could simply bundle the uniform termination rate into their transit fees. This would substantially simplify intercarrier billing. It also happens to be closer to the Internet's business model, wherein "upstream" carriers deliver packets between their "downstream" customers without additional bilateral payments.

For example, if carrier "T" operated a tandem switch, and received calls from carriers "Q" and "G" that were destined for carrier "V", then T could simply invoice Q and G for the price of its transit service *and* the price of V's termination. This would net to the same as the status quo, in which V invoices Q and G (and every other carrier) separately. The main losers, of course, would be the CABS billing industry. We suggest that this pass-through compensation model be considered in the future.

Measures to ensure proper billing

The fact that rates may become unified over time does not excuse intermediate providers from meeting reasonable obligations to pass information to the terminating carriers. While the draft Orders focus on CPN and charge numbers, which are valid issues, we call upon the Commission to add one more item to the list. Carrier Identification should be passed as well. At the present time, carriers such as CLECs who subtend ILEC tandem switches can receive calls, delivered to the

tandem by IXCs, in which the CIC is set to “0000” by the tandem. Thus the CLEC does not know which IXC to bill for the call unless it purchases that data, typically in the form of Daily Usage Files, from the tandem owner. This should not be necessary. Tandem owners should be given the choice of either delivering the CID or taking responsibility for paying for the call themselves, as described above. In practice, it may eventually be more appropriate for tandem owners to take ownership of these calls and apply pass-through compensation, rather than require the current web of bilateral relationships, but until then, they should not hold necessary information for ransom.

Originating access should be abolished

We concur with the tentative conclusion that originating access charges should be abolished. Originating access is in effect a collect-call charge rendered on the recipient of a call or leg of a call. These charges rarely have a basis in cost; they are a vestige of the separations process and mainly serve to subsidize LECs. The reciprocal compensation regime does not impose such charges; and in the interest of rate unification, the reciprocal compensation structure of sent-paid termination charges should be the surviving one. To the extent that an IXC purchases equal-access call originating service from a LEC, these costs can be divided between the two carriers, with the IXC paying for port charges on the LEC network, and the LEC’s customers paying the cost of reaching that port (typically on a tandem switch, though the term “access tandem” should itself become obsolete).

These charges should be phased out rapidly, as they have a pernicious impact on rate *structure*. In particular we note that originating access is typically imposed on LECs who directly deliver intraLATA calls to other LECs when one LEC originates the call outside of the terminating LEC’s retail local calling area (at least if the terminating LEC is an ILEC). This tends to force the originating carrier to charge tolls for short-haul intrastate calls, especially when intrastate access rates are high, or absorb high charges. But it favors VoIP providers, who are exempt, encouraging traffic to move to VoIP providers. CMRS carriers are generally exempt from this, because they do not pay access for intra-MTA calls, avoiding most high intrastate access charges, and this creates a competitive disadvantage for state-certificated LECs.

800 should retain its reversed status

For some years now, the "open" end of 800-type calls has been treated as "terminating" access, while the closed end has be treated as "originating", even though calls actually originate at the open end. This is not explicit in the draft Orders, but for the sake of avoidance of doubt, it should be explicitly retained. Thus a carrier who originates an 800 call should be able to collect terminating compensation, even if, as suggested, originating-side compensation is removed. To the extent that 800-number calls involve database dip charges and other additional costs, these costs should be allowable, and charged to the 800 carrier as a "terminating" expense.

Feature Group A should be abolished in the first stage

Feature Group A was invented in the 1970s as a way to collect contributions from the new interexchange carriers that had begun to use business lines in order to provide switched service. In that era, before the USF was created, separations revenues were seen as very important to the local exchange carriers, and new services such as MCI's Execunet were seen as not paying their fair share of these costs. The Exchange Network Facilities for Interstate Access (ENFIA) agreements were later codified into Access tariffs. The interexchange carriers later moved the bulk of their connections to the newer Feature Group D, which offered equal access. Feature Group A remained in place for miscellaneous line-side applications that were seen as not "local" for price purposes but which were otherwise handled as if they were, and are not subject to an exemption.

We suggest that Feature Group A be eliminated promptly, and line-side circuits used for purposes today considered "access" be treated as subscriber circuits. This solves several problems. In particular, it is a clean permanent solution to the definitional problem of the "enhanced service exemption". If there is no such thing as FGA, then a line-side circuit (including an ISDN PRI or even a SIP connection) on a carrier switch is simply a local line, no matter what it carries. The content of the calls it receives or originates are irrelevant. There is nothing to exempt, nothing to treat differently from any other call. If it looks local, it is local, and is subject to cost-based reciprocal compensation or the new unified rate.

FGA matters at the intercarrier level because it is also at the heart of the VoIP, Foreign Exchange and "Virtual NXX" controversies. VoIP providers generally purchase service from CLECs. The proposed Orders codify the exemption from switched access charges that was implicit in the April, 1998 *Report to Congress*. Coalition members make use of this exemption to provide

connectivity to VoIP services, and we concur that such connections should remain access-exempt. However, the exemption as now defined appears to be based on the use of IP *technology*, and this raises some question as to what is, or is not, exempt VoIP, who would get to define "IP" as technology changes, and whether this is a sustainable long term policy. The exemption need not be technology-specific. A LEC can then use VoIP or TDM or any other technology that it sees fit to provide telephone exchange service, while a VoIP (or other enhanced services) provider who leases access from a LEC over PRI, SIP or other "FGA-type" circuits could benefit from the LEC's unquestioned interconnection rights.

Hence the current definition of VoIP as an information service, and similar issues, are rendered moot in the absence of FGA. What is now seen as the terminating leg of an Access call would be treated as simply an intraLATA call. A VoIP provider could originate such a call (that is, terminate a VoIP-originated call into a LATA network) using a charge number associated with the local PRI itself, even as the caller ID field carries (as it should) a distant number associated with the VoIP subscriber. The termination charge would be reciprocal compensation from the POI to the destination, not based on the distant origin of the VoIP call.

Likewise, if a call to an ISP modem is received by a CLEC at its appropriate POI for that called number, and the actual modem is not in the originating caller's local calling area as defined by the originating caller's carrier, the call today is often considered "virtual NXX" or "FX". In some states and under some ICAs this has been treated as any other local call if within a LATA. In some it has been handled as "bill and keep" and does not receive reciprocal compensation or pay access rates. But in a few cases, sometimes varying between interconnection agreements, it has been treated as FGA originating access and the ILEC is entitled to charge the CLEC recipient of the call. This would of course be uneconomical and no CLEC would ever provision this intentionally, but FGA originating access back-charges have been used to shut down modem-serving CLECs. The Order on Remand appears to rectify this in the specific case of ISP-bound calls, which accounts for most Virtual NXX usage. A separate exemption appears to already apply to VoIP calls. By abolishing FGA, these conditions are generalized; all of these and other FX calls are simply treated as local, and what happens on any one carrier's side of the POI, or behind a subscriber's demarcation, is irrelevant. It should be self-evident that such a regulatory regime is more amenable to innovation than one which attempts to classify calls based upon how they are handled by the recipient, what protocol is used, or where the media gateway is located.

Preserving Feature Group D access revenues during transition

If Feature Group A is abolished promptly, as we suggest, then traditional interexchange carriers might have an incentive to reconfigure their networks and move the terminating side from Feature Group D to Feature Group A. This is not our intention. We note that interexchange carriers have, at times, improperly "re-originated" calls to make them appear to be local, and we are not seeking to legitimize that practice.

Instead, we propose a simple transitional rule. Until termination rates are unified and the issue becomes moot, Feature Group D terminating access rates should continue to be applied to all interLATA and equal-access (IXC-handled) intraLATA toll calls that originate via Feature Group D. Hence a traditional PSTN call that takes advantage of the simple and direct dialing procedures of Feature Group D origination should not be allowed to evade terminating access via Feature Group A re-origination.

This is a cleaner way to distinguish "VoIP in the middle" calls from the type of customer-premise VoIP calls that are exempt from access charges. The former are generally equal access (FGD) calls whose IXC happens to use VoIP technology, transparently to the caller. This should not be treated differently from any other PSTN toll calls. The latter are generally "Internet telephony" calls, which are made using special equipment via FGA. The physical location of the media gateway need not be the distinguishing factor, as appears to be the case at present.

Appropriate termination rate levels

The Commission asks two questions regarding the appropriate level for call termination. One is whether it should be TELRIC or a lower unburdened "incremental cost", the other whether it should be uniform statewide or separate by company. We generally support TELRIC, as it more accurately reflects the totality of the costs involved in operating a carrier. Even if an unburdened cost standard is selected, the rate should reflect more than the (admittedly very low) current traffic-sensitive cost of local switching equipment. POI to destination transport, for example, is a cost.

Small carriers have a valid point in saying that their costs are higher than those of the large carriers. We also note that by suggesting a statewide value to be applied to all carriers, the draft Orders are already deviating from the concept of paying a carrier's actual costs and using a surrogate instead. The main advantage of this is regulatory simplicity; with thousands of Study

Areas around the country, creating new rates in each one could take a major effort. We instead suggest a different scheme that provides both a reasonable surrogate for costs and provides better support for small carriers, while reducing regulatory complexity.

We note that the draft Orders call for rates to be symmetrical, which would be the case if all carriers' rates were the same, but we observe that the Further Notice questions this latter assumption by suggesting separate per-carrier rates. Symmetry, a laudable goal, conflicts with providing smaller (presumably high-cost) carriers higher rates when carriers with different rates interconnect with one another, but we see that latter goal as being valuable too, especially if it helps hold down universal service costs. Both access and reciprocal compensation rates today for small ILECs (and mirroring small rural CLECs) tend to be higher than for larger ILECs.

Rather than have a single terminating rate for all carriers, we suggest that unified call termination rates be set on a single graduated scale, applied to the *total* volume of calls terminated by a carrier from *all* other carriers. The incremental cost per minute of calls would go down with volume, so the lowest-volume carriers would have the highest rates. Usage would be aggregated monthly on a market-area or state basis, such that a holding company with several small contiguous or nearby OCNs 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:

Minutes/month above	Minutes/month to	rate per minute
0	500,000	$.01
500,000	10,000,000	$.004
10,000,000	(unlimited)[16]	$.001

[16] 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 tax code.

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 to reflect the actual level of traffic delivered. This would not require biannual readjustment of ILEC access tariffs, as happens at present, 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.

Coalition members are CLECs, not ILECs, and need to be treated fairly in this as well. One major difference between the current reciprocal compensation rules and interstate access rules is that in the case of reciprocal compensation, the rate is symmetrical with each underlying ILEC, while in the case of interstate switched access, the allowable rate is the lowest of any of the underlying ILECs'. But CLECs often interconnect with multiple underlying ILECs and the "one line" lowest-rate access mirroring rule can create disparities for small CLECs who mostly operate in rural areas, or whose rural areas have a small RBOC presence.

In the case of graduating-scale termination, a CLEC that provides some of its service to customers in the service area of a small ILEC, and whose traffic is in balance with that ILEC, should not be penalized. If the CLEC were a high-volume ($.001, in the example above) carrier and one ILEC were a minimum-volume ($.01) carrier, if perfectly-balanced traffic were charged at the carriers' own rates, it would result in a large net flow (equivalent to $.009/minute) to the ILEC. Instead, the bilateral traffic imbalance, in minutes, should be computed first, and only then is the imbalance billed, at the current graduated rate of the carrier receiving more minutes. Calls delivered by IXCs (Feature Group D interexchange carriers) would not balance originating minutes; all terminating equal access minutes should be counted at the terminating carrier's rate.

Phase-in can be faster

The proposed ten-year phase-in is excessively long. The proposed ten-year "glide path" reaches the extremely low uniform incremental-cost level. But with a higher ultimate terminating rate level, especially for small carriers, as we have proposed, there is no need for Stage Three, the final six years, which lowers rates below current Section 251(b)(5) TELRIC levels. Terminating rates should be unified at the graduated rate within four years.

Respectfully submitted this 26th day of November, 2008, by its consultant,.

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