

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
)
Developing a Unified Intercarrier) CC Docket No. 01-92
Compensation Regime)
)

FURTHER NOTICE OF PROPOSED RULEMAKING

Comments of Frontier Communications

Gregg C. Sayre
Associate General Counsel – Eastern Region

Alex J. Harris
Vice President – Regulatory
Frontier Communications
3 High Ridge Park
Stamford, CT 06905
203-614-5173
Alex.Harris@czn.com

Frontier Communications
180 South Clinton Avenue
Rochester, NY 14646-0700
(585) 777-7270
gregg.sayre@frontiercorp.com

Kenneth F. Mason
Director – Federal Regulatory
Frontier Communications
180 South Clinton Avenue
Rochester, NY 14646-0700
585-777-5645
KMason@czn.com

Date: May 23, 2005

EXECUTIVE SUMMARY

Frontier Communications (“**Frontier**”) hereby submits comments in the Commission’s Further Notice of Proposed Rulemaking (“**FNPRM**”) on Developing a Unified Intercarrier Compensation Regime, CC Docket No. 01-92, (released March 3, 2005). On May 9, 2005, Frontier proposed the Universal Telecommunications Freedom Plan (“**UTF Plan**”; see Ex Parte of Frontier Communications, CC Docket No. 01-92, May 9, 2004). The UTF Plan is an integrated, comprehensive reform proposal and should be adopted (see *Appendix*).

While strong arguments may be made that the Commission already has authority to implement comprehensive unified intercarrier compensation and universal service reform, in practical terms the Commission will be able to implement such reforms more speedily and with greater certainty for industry and consumers, by first securing explicit and specific authority.

Comprehensive intercarrier compensation and USF reform should: (i) be competitively and technologically neutral; (ii) send rational price signals; and (iii) conform to the principle that the retail Service Provider of any given traffic should bear ultimate responsibility for originating, routing and terminating such traffic. Proposals based on bill-and-keep compensation structures, “edge” type interconnection architectures, or which prescribe separate treatments based on carrier segment, traffic type or technology, inherently violate one or more of these criteria. The UTF Plan uniquely satisfies all three criteria and will enable optimally efficient markets for network interconnection. In order to safeguard Universal Service, Universal Service reform and intercarrier compensation replacement should be implemented simultaneously with intercarrier compensation reform. The UTF Plan uniquely provides for competitively neutral replacement without requiring revenue transfers to endusers and without resort to long transition periods which would only exacerbate current intercarrier compensation problems. Furthermore, the UTF Plan provides for optimal market-based solutions to transiting issues, and avoids any necessity for creation or maintenance of exceptions for wireless traffic or service providers.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
INTRODUCTION	1
I. THE COMMISSION SHOULD SEEK AN EXPLICIT LEGISLATIVE MANDATE TO AVOID INDUSTRY UNCERTAINTY	3
II. INTERCARRIER COMPENSATION REFORM MUST PROMOTE ECONOMIC EFFICIENCY.....	4
A. SOLUTION MUST BE TECHNOLOGICALLY AND COMPETITIVELY NEUTRAL TO AVOID ARBITRAGE	4
B. SOLUTION MUST PROVIDE RATIONAL PRICE SIGNALS	5
C. SOLUTION MUST ASSIGN RESPONSIBILITY TO THE RETAIL SERVICE PROVIDER	9
III. INTERCARRIER REPLACEMENT MECHANISMS SHOULD BE IMPLEMENTED IN CONJUNCTION WITH COMPREHENSIVE UNIVERSAL SERVICE REFORM	10
A. INTERCARRIER REPLACEMENT SHOULD NOT REQUIRE ENDUSER INCREASES	11
B. THE CONTRIBUTION BASE MUST BE BROADENED AND TIED EXCLUSIVELY TO ENDUSER CONNECTIONS IN ORDER TO ENSURE PROPER AND FAIR FUNDING.....	12
C. NEW DISTRIBUTION MECHANISMS FOR USF AND INTERCARRIER REPLACEMENT SHOULD SUPPORT RURAL COLR AND PROMOTE BROADBAND INVESTMENT	14
IV. NETWORK INTERCONNECTION RULES SHOULD BE UNIFORM, SIMPLE, AND ADHERE TO THE PRINCIPLE OF RETAIL SERVICE PROVIDER RESPONSIBILITY	15
V. A LONG TRANSITION WILL UNDERMINE REFORM.....	16
VI. REGULATION ON TRANSITING SHOULD BE LIMITED TO PROTECTING ISOLATED END OFFICES.....	17
VII. THERE ARE NO UNIQUE CMRS COMPENSATION ISSUES UNDER THE UTF PLAN.....	17
CONCLUSION	18
APPENDIX	19

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Developing a Unified Intercarrier Compensation Regime)	CC Docket No. 01-92
)	

FURTHER NOTICE OF PROPOSED RULEMAKING

Comments of Frontier Communications

INTRODUCTION

Frontier Communications (“**Frontier**”) hereby submits comments in the above captioned Further Notice of Proposed Rulemaking (“**FNPRM**”)¹ on intercarrier compensation. Frontier is a mid-size holding company with incumbent local exchange carrier (“**ILEC**”) operations in 24 states. As an ILEC, Frontier operates in one of the most competitive (both residential and business) urban markets in the country (Rochester, NY), but the balance of its ILEC operations are located in several small, high cost rural markets throughout the United States. In most of its ILEC markets, Frontier operates under federal price cap regulation, but operates under NECA Average Schedules in some of its smallest rural markets; on an intrastate basis, Frontier operates under a mix of traditional rate-base, rate-of-return regulation and alternative forms of regulation. Additionally, Frontier’s affiliate, Electric Lightwave, LLC (“**ELI**”), is a leading competitive local exchange carrier (“**CLEC**”) and enhanced service provider, with local operations concentrated in six western states (in five of which, Frontier also operates as an ILEC), and long distance operations throughout the country. This somewhat unique mix of size, industry segment, geographic scope and business conditions, allows Frontier special insights

¹ Developing a Unified Intercarrier Compensation Regime, CC Docket No. 01-92, Further Notice of Proposed Rulemaking, (rel. March 3, 2005).

into the major issues confronting the Federal Communications Commission (the “**Commission**”) and the industry in regard to intercarrier compensation and universal service.

In the FNPRM, the Commission concludes the current intercarrier compensation regime is broken and that expanding competition and changing technology require reform. There is no controversy over this conclusion and Frontier likewise concurs that comprehensive reform is badly needed. Frontier does not, however, support a bill-and-keep regime, as introduced by the Commission in the initial NPRM² and as proposed³ by certain parties in this proceeding,³ as the appropriate solution. While a *mandatory* bill-and-keep regime, like any truly unified system, would likely result in a reduction in arbitrage, that system’s failure to provide rational price signals for activities and facilities uniquely tied to intercarrier connectivity, will inherently result in efficiency losses and a diminishing of investment incentives. Frontier believes a default unified regime based on the capacity concept for intercarrier compensation, and built on free market principles, will best satisfy the objectives of efficiency, transparency, stability and sustainability.

Therefore, on May 9, 2005, Frontier proposed the Universal Telecommunications Freedom Plan (“**UTF Plan**”),⁴ to the Commission. The UTF Plan lays out an integrated and comprehensive proposal for intercarrier compensation reform, universal service reform and regulatory relief, and should be adopted. The UTF Plan is included as an Appendix to this filing. Not only will a properly constructed capacity-based system, such as the UTF Plan, eliminate arbitrage, but it will also send proper price signals for interconnection related activities, dramatically reduce the incidence of carrier disputes, and optimize investment incentives.

² See Developing a Unified Intercarrier Compensation Regime, CC Docket No. 01-92, Notice of Proposed Rulemaking, (“ICC NPRM”) (rel. April 27, 2001) at ¶ 37.

³ See Ex Parte Brief of the Intercarrier Compensation Forum in Support of the Intercarrier Compensation Forum in Support of the Intercarrier Compensation and Universal Service Reform Plan Legal Brief, CC Docket No. 01-92, (“ICF Brief”)(Oct. 5, 2004) at p. 20; and Ex Parte ICC Plan Outline by Western Wireless Corp. CC Docket No. 01-92, (“Western Wireless Plan”)(Nov. 18, 2004) at p. 2.

⁴ See Ex Parte of Frontier Communications, CC Docket No. 01-92, (“UTF Plan”) (May 9, 2004).

In the FNPRM, the Commission solicited comment on options for reforming intercarrier compensation in terms of: (i) legal basis; (ii) economic basis; (iii) enduser and universal service effects; (iv) network interconnection impacts; (v) implementation issues; (vi) transit services; and (vii) CMRS compensation issues.⁵ Frontier's comments describe how the UTF Plan represents a superior solution to each of the seven general areas on which comments were requested. Additionally, the actual UTF Plan document, attached hereto as an Appendix, provides additional rationale for its adoption.

I. THE COMMISSION SHOULD SEEK AN EXPLICIT LEGISLATIVE MANDATE TO AVOID INDUSTRY UNCERTAINTY

Strong arguments can be made that the Commission has general authority under current law to address the matters raised in the FNPRM, and to adopt the reforms proposed in the UTF Plan. However, as a practical matter, any action by the Commission to create a unified intercarrier compensation regime, as well as to implement necessary corresponding changes in the universal service support system, will almost certainly generate broad legal challenges on multiple fronts. The process and progress of such challenges could take years to resolve, creating disruptive uncertainty in the industry, indefinitely delaying the benefits of reform and extending the application of the current flawed, unsustainable rules. Alternatively, if the Commission attempts to avoid such legal challenges by limiting the scope of its action to just interstate access, the Commission will only succeed in exacerbating the jurisdictional and service disparities that drive the arbitrage and uncertainty undermining the current system.

In order to avoid both of these unfortunate outcomes, Frontier strongly recommends the Commission seek an explicit legislative mandate to comprehensively and uniformly resolve intercarrier compensation and universal service reform on an integrated basis. It appears that

⁵ FNPRM at ¶ 4.

Congress is ready to begin serious consideration of these matters, and that a direct appeal from the Commission for such explicit direction would not be rebuffed. In practical terms, securing an explicit legislative mandate will likely result in beneficial effective reform much sooner than the alternative path of indefinite legal challenges with unknown outcomes.

II. INTERCARRIER COMPENSATION REFORM MUST PROMOTE ECONOMIC EFFICIENCY

In the FNPRM, the Commission proposed that any new approach should encourage the efficient use of, and investment in, telecommunications networks, and the development of efficient competition.⁶ Frontier fully concurs with this objective. This objective can only be satisfied by an intercarrier compensation regime which:

- ensures technological and competitive neutrality, and eliminates arbitrage;
- provides rational price signals; and
- requires that for any given traffic, the provider of the retail service associated with such traffic bears the ultimate responsibility for ensuring the traffic is appropriately originated, routed and completed.

Bill-and-keep systems inherently fail to satisfy the second and third of these criteria. Furthermore, to the extent any plan continues to artificially distinguish between traffic types and service providers, it will fail the first criteria as well. Only the UTF Plan meets all three of these criteria.

A. Solution Must Be Technologically and Competitively Neutral to Avoid Arbitrage

The Commission recognizes, and Frontier concurs, that any new intercarrier compensation regime needs to be technologically and competitively neutral,⁷ and that it should

⁶ See ICC NPRM at ¶ 31.

⁷ FNPRM at ¶ 33

provide regulatory certainty and avoid arbitrage and Service Provider disputes.⁸ These criteria can not be met via regulatory mechanisms or monitoring requirements, but rather must be self-enforcing attributes and incentives built into the basic design of the intercarrier compensation system.

The UTF Plan submitted by Frontier uniquely satisfies these criteria, by eschewing “carve-outs”, complex exceptions or special treatments aimed at specific segments, technologies, or classes of service provider. The UTF Plan, unlike virtually all the others submitted to date, establishes a single, unified, simple, clear and concise set of rules governing all forms of intercarrier connectivity and compensation, for all traffic types, service providers, industry segments and geographic areas without distinction. That claim can not be credibly attributed to any of the other plans which have been developed to the same level of detail as the UTF Plan, as virtually all those plans continue (and, in some cases, expand) the arbitrary distinctions inherent in the current system.

Furthermore, by basing compensation for all traffic -- whether picked-up-from/delivered-to the ultimate originating/terminating platform via a direct transport facility or via a “transit” arrangement – on a single, unified, flat-rated, capacity-based port charge, the UTF Plan eliminates the need to measure, classify or bill for minutes of use, eliminating opportunities for arbitrage and the basis for the vast majority of intercarrier disputes between Service Providers. Eliminating the business “friction” of measurement, monitoring, billing and dispute resolution, will dramatically enhance the overall efficiency of the industry, to the benefit of Service Providers, customers, and the American economy as a whole.

B. Solution Must Provide Rational Price Signals

Ensuring proper price signals for intercarrier compensation is vitally important since any deviations from rational pricing will not only distort the wholesale market but the retail market as

⁸ FNPRM at ¶ 33

well. Mandatory bill-and-keep departs from rational pricing by failing to address and account for asymmetric traffic patterns between Service Providers which disproportionately impact each Service Provider's origination/termination related expenses.⁹ Additionally, any intercarrier compensation system, whether bill-and-keep or an alternative, which incorporates an "edge" type interconnection architecture will likewise depart from rational pricing by failing to address and account for geographic differences in the provision of transport. Failure to account for asymmetric traffic patterns will likely stimulate business plans which inefficiently and uneconomically overuse originations/terminations on other Service Providers' networks; similarly, failure to account and compensate for geographic differences in the provision of transport facilities will undermine incentives for Service Providers to invest in such facilities. To the extent two or more Service Providers determine that it may be to their mutual benefit to adopt bill-and-keep or an edge-type interconnection architecture in specific circumstances or under specific conditions, they should be free to do so in a non-discriminatory manner. However, establishing a mandatory default solution incorporating one or both of those elements will severely undermine the industry.

The UTF Plan proposed by Frontier suffers from neither of these infirmities, and will provide rational price signals for all elements of intercarrier connectivity and compensation. As noted previously, Frontier recommends the Commission adopt a uniform architecture and rate structure for intercarrier compensation without distinguishing between traffic type, Service Provider type, technology type or jurisdiction.

Uniformity is necessary, but not sufficient to ensure economic efficiency. The compensable activities must be related to underlying economic costs, and the actual rates must

⁹ For bill-and-keep to provide the proper incentives in all cases, the firms exchanging traffic would also need to be vertically integrated with similar economies of scale and scope; such conditions may be satisfied among the four Regional Bell Operating Companies (RBOC), but are definitely not satisfied among the huge number of independent ILECs (like Frontier), independent CLECs, independent Commercial Mobile Radio Service (CMRS) providers, independent interexchange carriers (IXC), or independent Voice over Internet Protocol (VoIP) providers.

be established at rational levels in order to minimize market distortions, limit opportunities for arbitrage and maximize rational free market competition. To this end, the UTF Plan proposes a capacity-based system composed of just three simple elements: (i) Ports, (ii) Transport, and (iii) Transiting. Under the UTF Plan, market-based mechanisms will ensure optimal pricing of all three elements.

Billing termination/origination on the basis of capacity – i.e., on ports – is economically rational and appropriate. The incremental cost associated with interconnection is in the establishment and maintenance of dedicated hardware interfaces (ports) for use by an interconnecting Service Provider. However, there is virtually NO additional incremental cost of sending a minute-of-use across such a dedicated interface. Rather than reflecting the actual manner in which termination/origination costs are incurred, minute-of-use charging is merely a pricing mechanism by which the industry has historically rationed a somewhat arbitrary share of essentially fixed network costs among interconnecting service providers. While that mechanism was reasonably useful in past decades, it is inherently imprecise and unsuited to a competitive environment.

By contrast, a port-based charge system builds prices for interconnection on the basis of tangible hardware interfaces (and related activities) uniquely dedicated to an interconnecting Service Provider. Under such a system, there is no arbitrary rationing of costs, but rather an interconnecting service provider is charged based on the capacity of the interfaces it uniquely employs. These interfaces can be viewed as pieces of finite “real estate” on a switch, the costs of which do not significantly vary by the amount of traffic passed over those interfaces. An interconnecting Service Provider which maintains a single DS1 port on a given End Office, utilizing all 24 DS0 channels continuously 365 days a year, does not cause significantly different costs to the End Office provider than a separate interconnecting Service Provider which maintains a single DS1 port strictly to meet peak load requirements one day each month. Thus, charging both interconnecting Service Providers the same amount is more precise and

economically rational than billing those Service Providers based on minutes. Furthermore, as described in the UTF Plan document in the Appendix, a capacity-based charge system can apply equally as well for End Office ports used to connect trunk groups coming off a tandem.

The UTF Plan proposes a default uniform nationwide DS1-level monthly port rate of \$446. As described in the Appendix, this proposed rate is validated on two criteria. The first is a market-based criterion originally proposed by Home Telephone Company, Inc. and PBT Telecom in their intercarrier compensation proposal. That criterion suggested that a capacity-based intercarrier rate should be established comparable to standard retail enduser line rates in order to minimize arbitrage. The \$446 rate is comparable to the fully loaded PRI port rates charged by ILECs nationally. As a second criterion, this rate can be built up based on an average of 9,250 minutes per DS0 multiplied by \$0.002, which is the consensus forward-looking proxy per-minute-rate which has emerged through the NARUC intercarrier compensation process.¹⁰

Uniform nationwide pricing of such interfaces is appropriate because: (i) port costs are not inherently geographically variable¹¹; (ii) switching technology is becoming increasingly modular, and on a forward-looking basis the provision of ports can be expected to reflect constant returns to scale; and (iii) to the extent large individual Service Providers may possess purchasing power advantages over smaller individual Service Providers, small Service Providers may be able to mitigate such advantages by employing joint purchase arrangements or platform sharing.

Under the UTF Plan, transport – defined strictly as fixed transmission facilities, with no aggregated switching functionality -- would be wholly market priced. Unlike ports, the costs of

¹⁰ See Ex Parte of NARUC, CC Docket No. 01-92, (May 9, 2004).

¹¹ Indeed, the physical location of a port and the location of the bulk of the network served by the port may be wholly distinct. For example, CLEC and CMRS providers typically install large central switching platforms which may serve enduser locations separated by hundreds of miles; likewise, some rural ILECs employ a small number of host switches, subtended by large numbers of remote devices, in order to serve multiple geographically disparate areas.

transport (and all outside plant) vary in relation to density, volume and terrain. In order to ensure rational pricing, all Service Providers should be free to price transport based on market conditions. While some areas of the country may have only limited numbers of transport providers today, technology ensures that all such markets are effectively contestable and thereby prohibits Service Providers from engaging in uneconomic pricing of transport.

Similarly, transiting – defined as any aggregated delivery of traffic for origination or termination (analogous to tandem switched transport, common transport, or CLEC transiting) – is also geographically variable, owing to the fact that transport is an underlying component of transiting. As described in detail in the Appendix, in a capacity-based system a competitive market for transiting can be assumed to exist wherever multiple unaffiliated trunk groups to an individual network platform exist. Where such multiple unaffiliated trunk groups do not exist, the UTF Plan provides for a competitive bidding process, coupled with most-favored-nation safeguards, to harness market forces and thereby protect against market abuses.

C. Solution Must Assign Responsibility to the Retail Service Provider

The telecommunications industry is composed of literally thousands of diverse Service Providers with unique business plans and traffic patterns. This diversity of business plans reflects the vibrancy of the industry and the innovation and creativity of the American free market system. In order to ensure that such diversity continues to flourish, and that economically desirable business plans are rewarded in the marketplace, it is essential that the default intercarrier compensation system assign ultimate responsibility for the origination, transmission and termination of any given traffic (including paying compensation to any other networks which such traffic may traverse), to the provider of the retail service associated with such traffic. Any deviation from this principle will result in perverse outcomes, both encouraging economically irrational activities, and discouraging economically rational activities. For this reason, bill-and-keep compensation mechanisms and “edge”-based interconnection

architectures must be disqualified from consideration as elements within a mandatory default intercarrier compensation system.

As discussed previously, the mandatory default intercarrier compensation system proposed in the UTF Plan fully satisfies the principle that the retail Service Provider bear ultimate responsibility for the origination, transmission and termination of traffic. Additionally, however, the UTF Plan also allows Service Providers complete discretion to negotiate alternative arrangements, including bill-and-keep and edge-based architectures, on a voluntary, non-discriminatory basis. By adhering to the principle of retail provider responsibility in its default terms, while providing flexibility for mutual negotiation of alternative terms, the UTF Plan offers a superior solution.

III. INTERCARRIER REPLACEMENT MECHANISMS SHOULD BE IMPLEMENTED IN CONJUNCTION WITH COMPREHENSIVE UNIVERSAL SERVICE REFORM

As evidenced in the FNPRM, the Commission properly recognizes the relationship between intercarrier compensation and Universal Service, and the significant impact that reductions in intercarrier compensation could have on both companies and endusers in rural and high cost areas.¹² However, Frontier disputes assumptions that, for purposes of intercarrier replacement, ILECs should be differentiated based on whether they operate under federal price cap regulation. Such differentiation would be based on an arbitrary distinction which does not accurately reflect any relevant factors. A significantly more reliable criterion for differentiation would be between rural and non-rural study areas, which would reflect actual differences in cost

¹² FNPRM at ¶ 32

characteristics, existing rate levels, and traffic patterns between study areas.¹³

In undertaking intercarrier compensation reform, it is critical that the Commission not only create new mechanisms for intercarrier compensation replacement, but that it also reform the existing Universal Service Fund contribution and distribution mechanisms. Coordinating and integrating these reforms is essential in order to avoid adverse impacts on endusers and to maintain stability in retail markets.

Unlike virtually all the other intercarrier compensation proposals, Frontier's UTF Plan does not prescribe increases in Subscriber Line Charges ("SLC") or basic telephone rates. The UTF Plan is able to avoid such prescriptions due to three factors: (i) in contrast to bill-and-keep and "edge"-based systems, UTF preserves intercarrier revenue for all Service Providers at optimal, market-based levels, thereby reducing the revenues which must be recovered from other sources; (ii) under UTF all initial intercarrier replacement, as well as existing Universal Service Funding, is provided via a significantly broadened and reformed contribution mechanism; and (iii) subsequent reductions in intercarrier replacement under UTF occur gradually over several years, and Service Providers are allowed complete discretion to transition their business plans away from such revenues or to recover such reductions through increases in any combination of retail prices.¹⁴

A. Intercarrier Replacement Should Not Require Enduser Increases

The Commission asks whether or how Service Providers can recover revenues that are lost due to a change in the intercarrier compensation regime.¹⁵ The answer to this question will significantly impact both Service Providers and their endusers. Frontier strongly recommends that any intercarrier compensation solution adopted by the Commission minimize mandatory

¹³ Frontier, while predominantly a price cap ILEC, is also predominantly a rural ILEC with many of the same characteristics as rural rate-of-return ILEC's, except in its one non-rural study area.

¹⁴ See Ex Parte of Frontier Communications, CC Docket No. 01-92, ("UTF Plan")(May 9, 2004).

¹⁵ FNPRM at ¶ 99

shifts of revenue recovery to endusers, and that any such shifts occur gradually in the years after intercarrier compensation has been optimized.

It is vitally important that the Commission avoid “programmed” transfers to endusers via Subscriber Line Charge (SLC) increases or via increases of basic telephone rates to some national “benchmark” price levels. While such transfer mechanisms may have operated somewhat satisfactorily in prior eras when the industry was still monopolized, such mechanisms have become increasingly clumsy and imprecise in the era of broad intra- and intermodal competition. Nationwide “benchmarks” and nationally programmed SLC increases and other types of command-and-control price regulation are wholly inconsistent with the market forces which have been unleashed by competitive wireless, broadband and VoIP, and will only serve to artificially distort competition. Furthermore, the telecommunications industry is extremely diverse, with broad variations between local markets, and such mechanisms will not adequately accommodate those variations.

The UTF Plan avoids programmed increases in either SLCs or basic telephone rates. By establishing rational intercarrier replacement mechanisms which apply on a competitively neutral basis, with subsequent multi-year reductions in those mechanisms occurring only after intercarrier compensation has been optimized, the UTF Plan allows each Service Provider the opportunity and discretion to reduce its reliance on such replacement revenues or to recover those transferred revenues via increases reflecting actual market conditions. This approach results in an elegant solution to legacy revenue recovery problems in a manner wholly consistent with the current and accelerating competitive market realities.

B. The Contribution Base Must Be Broadened and Tied Exclusively to Enduser Connections In Order to Ensure Proper and Fair Funding

Virtually all of the proposals recognize that some form of increased support will be a necessary component of intercarrier compensation reform. As such, it is vitally important that the Commission reform the funding mechanisms for such support. The current USF

contribution mechanism irrationally differentiates between services and Service Providers. A particularly glaring example of such differentiation is the treatment of high-speed Internet access services.

Both cable modem and digital subscriber line (“**DSL**”) are technologies used to provide high speed Internet access to endusers. The services based on such technologies are clear and unambiguous substitutes for one another, and compete head-to-head in the marketplace. Currently, however, cable-modem, which is the dominant form of high speed Internet access today, is not assessed a USF contribution, while digital subscriber line (DSL) service is assessed. Similarly, the current contribution mechanism’s focus on interstate revenues both distorts competition and creates incentives for Service Providers to use imaginative revenue categorization to minimize their contribution obligations. The UTF Plan corrects these failings by changing the contribution mechanism and broadening the base of contributors.

The UTF Plan proposes the reformed contribution mechanism tie to a single, identifiable and verifiable activity/product: enduser connections. Under the UTF Plan, each enduser connection, regardless of medium, technology, purpose/use, or provider, will be assessed on a uniform scale based on the bandwidth of the connection. By assessing all enduser connections purely on the basis of bandwidth, the contribution base will be maximally broadened, individual Service Providers’ unique pricing/packaging decisions will not distort the effects of the contribution mechanism, and controversies over whether or to what extent a given service should contribute will be made moot, since the universe of assessed services will be limited purely to connections.

Such a mechanism will best ensure that Universal Service and intercarrier replacement will be funded over the long run, without distorting free market competition. Because the rapid development and convergence of services can be expected to blur distinctions between the activities we currently refer to as electronic communications, content and commerce, revenue-based funding mechanisms will be unreliable and difficult to maintain. Likewise, because

activities that do not rely on telephone numbers already serve as direct competitors and substitutes for services that do rely on telephone numbers, telephone number-based funding mechanisms will be inherently unreliable and unfair. Conversely, a mechanism which ties directly to the basic connectivity (bandwidth) provided to each enduser will not suffer from these infirmities and can be expected to provide a stable, easily maintained and predictable funding source. Because enduser connections that do not attach to a public network nonetheless compete with enduser connections that do connect to a public network and frequently are only useful to their users because of the separate availability of such public networks, such non-public network connections should also be included within the contribution base.

C. New Distribution Mechanisms for USF and Intercarrier Replacement Should Support Rural CoLR and Promote Broadband Investment

The goal of Universal Service is more relevant and complex than ever before. Beyond the traditional objective of ensuring that each American have access to a high quality, affordable telephone service, the Commission, the Congress, the Administration and many states have identified the additional objective of making affordable broadband access available nationwide.¹⁶ The current support mechanisms, however, fail on both objectives.

In terms of the traditional objective, imprecision in the manner in which Universal Service is distributed in Study Areas with multiple Service Provider recipients has caused rapid expansion of overall fund disbursements but reductions in support for many rural carrier of last resort (“CoLR”) networks. Thus, though the total fund has grown, the objective of universal telephone service, especially in rural areas, is under greater pressure than ever before. With regard to the second objective, all current USF and intercarrier compensation revenues flow

¹⁶ 47 U.S.C § 254 (b) 2

directly to activities tied uniquely to the public switched telephone network (“**PSTN**”), with no incentives or support provided for broadband deployment.

Only the UTF Plan, as described more fully in the Appendix, addresses and resolves both of these failings. Additionally, the UTF Plan would substantially streamline the USF and intercarrier replacement systems, ensuring long-term financial solvency and true competitive neutrality. Under the UTF Plan, distribution of existing USF would be reformed in a single precise mechanism, and two new mechanisms for intercarrier replacement would be created to address the unique conditions in rural and non-rural study areas. The three mechanisms would operate in concert to ensure competitive neutrality while supporting the maintenance and expansion of rural Carrier of Last Resort (CoLR) networks and promoting broadband investment.

IV. NETWORK INTERCONNECTION RULES SHOULD BE UNIFORM, SIMPLE, AND ADHERE TO THE PRINCIPLE OF RETAIL SERVICE PROVIDER RESPONSIBILITY

In order to avoid arbitrage, carrier disputes, and gamesmanship, network interconnection rules should be uniform and simple, and should adhere to the principle of retail service provider responsibility for all traffic types, service providers, or technologies. This means that a single default network architecture should apply without exception, unless two or more Service Providers specifically negotiate alternative terms. It further means that to the extent a Service Provider offers a service in which retail traffic pursuant to such service originates on a network the Service Provider does not own, that Service Provider will need to pay compensation to the originating network, as applies today with respect to originating access for long distance services. As described previously, various proposals based on “edge”-type architectures fail this basic principle and should thus be rejected. The UTF Plan, by contrast, proposes a single, uniform architecture to apply to all service providers nationwide, and which fully incorporates this principle. The UTF Plan architecture is described more fully in the Appendix.

V. A LONG TRANSITION WILL UNDERMINE REFORM

The Commission's conclusions that current intercarrier compensation mechanisms cannot be sustained and require comprehensive reform,¹⁷ are unassailable. The system is broken and must be fixed as quickly as possible. Every month the current system continues is another month of arbitrage, uneconomic pricing signals and market distortion, all of which currently and actively cause harm to America's Service Providers and consumers alike. Allowing the current failed system to continue to ferment for any significant period of time will only make matters significantly worse.

For these reasons, any plan requiring a long transition from the current broken system should start with two strikes against it and be discounted by the Commission. Such transitions will themselves stimulate the types of gamesmanship and arbitrage that bedevil the current regime. The real issue of transition does NOT stem from intercarrier compensation *reform*, but rather from intercarrier compensation *replacement*. However, it is a false premise to assume that a transition in the latter must necessarily require a transition in the former.

The UTF Plan would provide for immediate reform of intercarrier compensation, coupled with immediate full intercarrier replacement via a broadened support contribution mechanism. By simultaneously broadening the contribution mechanism, the adverse impacts and market distortions on endusers and Service Providers will be avoided. In subsequent years, the replacement mechanisms would be gradually reduced, but the benefits of a rational compensation system will have already been realized years before.

¹⁷ FNPRM at ¶¶ 15-17, 28.

VI. REGULATION ON TRANSITING SHOULD BE LIMITED TO PROTECTING ISOLATED END OFFICES

The Commission asks comment in regard to obligations of Service Providers to offer transit services.¹⁸ Any new system must ensure that transiting – i.e., any aggregated ingress/egress arrangement whether provided via “common trunks”, “tandem switched transport”, “transiting” or similar arrangement – continues to be available to all networks and network platforms on a fair and efficient basis. However, Frontier believes transiting can be safeguarded with minimal regulation provided that the intercarrier compensation system is properly designed to harness free market forces, and that effective, minimally-invasive market-based regulatory mechanisms are employed to safeguard those markets where such forces are not present. The manner in which the UTF Plan would achieve such outcomes is detailed in the Appendix.

VII. THERE ARE NO UNIQUE CMRS COMPENSATION ISSUES UNDER THE UTF PLAN

The Commission inquires as to compensation issues unique to Commercial Mobile Radio Service (“**CMRS**”) providers. Under the current patchwork of intercarrier compensation systems, CMRS providers operate under different rules than wireline providers; indeed, under the present system different rules apply to ILECs, CLECs, IXCs, CMRS providers, and Enhanced/Information Service Providers. This distinction between service providers is a failing of the current system, which should not be preserved. Under the UTF Plan all distinctions would be wiped away, and all Service Providers and technologies would be placed on a level playing field to compete based on their own merits. It is too long that the telecommunications industry has deviated from this basic tenet of American society, and the Commission should seize this opportunity to correct this failing by adopting the UTF Plan.

¹⁸ FNPRM at ¶ 129

CONCLUSION

For all the forgoing reasons, Frontier respectfully recommends the Commission expeditiously seek an explicit and specific mandate from Congress to implement intercarrier compensation reform, USF reform and related regulatory reform as specified in the Universal Telecommunications Freedom (UTF) Plan. The UTF Plan best satisfies the requirements of the industry and consumers, by harnessing market forces to rationalize compensation and support, and thereby safeguard market stability and Universal Service.

Respectfully Submitted,



Gregg C. Sayre
Associate General Counsel – Eastern Region

Alex J. Harris
Vice President – Regulatory
Frontier Communications
3 High Ridge Park
Stamford, CT 06905
203-614-5173
Alex.Harris@czn.com

Kenneth F. Mason
Director – Federal Regulatory
Frontier Communications
180 South Clinton Avenue
Rochester, NY 14646-0700
585-777-5645
KMason@czn.com

Frontier Communications
180 South Clinton Avenue
Rochester, NY 14646-0700
Tel: (585) 777-7270
Fax: (585) 263-9986
gregg.sayre@frontiercorp.com

Date: May 23, 2005

APPENDIX

UNIVERSAL TELECOMMUNICATIONS FREEDOM (UTF) PLAN

UNIVERSAL TELECOMMUNICATIONS FREEDOM (UTF) PLAN
An Integrated & Comprehensive Reform Proposal

Frontier

A Citizens Communications Company

Alex J. Harris
Vice President - Regulatory

Kenneth F. Mason
Director – Federal Regulatory

May 9, 2005

UNIVERSAL TELECOMMUNICATIONS FREEDOM (UTF) PLAN
An Integrated & Comprehensive Reform Proposal

TABLE OF CONTENTS

INTRODUCTION	1
INTERCARRIER COMPENSATION REFORM	4
RATIONALE.....	5
PRINCIPLES.....	6
ARCHITECTURE & COMPENSATION	6
Ports.....	7
Transport.....	9
Transiting	10
UNIVERSAL SERVICE FUND REFORM & INTERCARRIER REPLACEMENT	13
RATIONALE.....	13
CONNECTION-BASED CONTRIBUTION MECHANISM	14
USF CALCULATION & DISTRIBUTION	15
NON-RURAL INTERCARRIER REPLACEMENT CALCULATION & DISTRIBUTION.....	16
RURAL INTERCARRIER REPLACEMENT CALCULATION & DISTRIBUTION	17
REGULATORY REFORM.....	20

UNIVERSAL TELECOMMUNICATIONS FREEDOM (UTF) PLAN:

An Integrated & Comprehensive Reform Proposal

INTRODUCTION

The UNIVERSAL TELECOMMUNICATIONS FREEDOM (UTF) plan is a comprehensive integrated reform proposal which is offered to advance communications freedom on three critical dimensions:

- *Freedom* from irrational intercarrier compensation structures and charges which today distort prices, invite arbitrage and limit consumer options; to be replaced by a rational system of default charges which will drive lower prices and greater choices.
- *Freedom* from backward-looking universal service programs which discourage investment in advanced services; to be replaced by efficient forward-looking mechanisms which encourage investment in universally affordable broadband as well as universally affordable plain old telephone service.
- *Freedom* from outmoded and obsolete regulations which are no longer necessary for consumer protection and which now only serve to limit consumer choices and impair free market competition; to be replaced by a minimally intrusive combination of requirements and incentives which will effectively safeguard consumers and the free markets upon which they depend.

Reform on all three of these dimensions is urgently required.

Today, communications markets are characterized by robust new forms of competition and by major deep-pocketed competitors which were never anticipated by traditional regulatory frameworks, nor by the framers of the Telecommunications Act of 1996. In the traditional categories, service providers operating as competitive local exchange carriers (CLEC) or interexchange carriers (IXC) compete head to head with incumbent local exchange carriers (ILEC) for delivery of all services to mid-size and large business customers everywhere. In non-traditional categories, providers of commercial mobile radio service (CMRS) and Voice over Internet Protocol (VoIP) services are aggressively targeting consumer and business customers of all sizes, as direct substitutes for, not merely as complements to, conventional telephone services. More significantly, cable television (CATV) providers lead in the provision of consumer broadband throughout the country and are leveraging their position to aggressively enter traditional telecommunications, including voice telephony. Finally, new broadband wireless and power line technologies are emerging which promise even greater diversity of suppliers. The advent of this significant and aggressive inter-modal competition makes traditional telephony regulation unsustainable.

Similarly, the entire local exchange (LEC) industry¹, almost from the moment the concept of “universal service” was originated in 1907, has depended on indirect support mechanisms to augment the revenues it derives from telephone end users. The LEC industry now finds itself in the early 21st century dependent upon two major indirect support mechanisms – intercarrier compensation (IC) and universal service funding (USF) -- both of which, in their present forms, are fundamentally incompatible with competitive markets, and therefore cannot be sustained in their present forms due to accelerating competitive, consumer, technological and political

¹ Encompassing both ILECs and CLECs.

UNIVERSAL TELECOMMUNICATIONS FREEDOM (UTF) PLAN:

An Integrated & Comprehensive Reform Proposal

pressures. Specific factors undermining these indirect support mechanisms in their current forms and at current dollar levels, include:

- Avoidance: Service providers may exploit loopholes to minimize their USF & IC obligations, thereby compromising the operation of these indirect support mechanisms.
- Exploitation: Service providers may take otherwise irrational actions in order to aggressively exploit USF and IC, rapidly bleeding USF programs and bloating other service providers' IC expenses.²
- Service/Support Mismatches: Some service providers are employing newer technologies (e.g., VoIP) which may not require support; simultaneously, other service providers are employing newer technologies in order to provide new services (e.g., high speed connections) for which support may be required but for which no support is currently provided.
- Geographic Imprecision: Due to averaging within existing support mechanisms, a new entrant serving only the lowest cost portions of a study area may receive the same proportional support as an incumbent serving the entire study area.
- Business Model Distortion: Because service providers currently have no recourse but to rely on the current indirect support mechanisms, they have been forced to mold their businesses around those mechanisms, and may be artificially inhibited from rationally migrating to more optimal business models which would provide greater consumer benefits.
- Consumer Opposition: Consumers are "voting with their pocketbooks" against current USF surcharges/fees and high per minute of use prices, by actively price shopping surcharges/fees as well as prices levied by competing providers. Regulations requiring surcharges/fees on one group of services, but not on other similar services, are being exploited for marketing advantage, creating unbalanced competition.

Each of these factors is individually formidable – collectively, they are unstoppable. Unaltered continuation of traditional telephone regulation, intercarrier compensation and universal service support mechanisms will have disastrous results for consumers, service providers and the overall American economy. The UNIVERSAL TELECOMMUNICATIONS FREEDOM (UTF) plan is offered as a means to avoid such an outcome.

UTF is a comprehensive, integrated proposal for telecommunications reform focused on the three main challenges to the industry: (1) inter-carrier compensation reform, (2) universal service funding reform, and (3) regulatory reform. Under UTF, reform on all three elements will occur concurrently in order to stabilize markets and the industry and free beneficial market forces, without any up front increases in enduser rates. Subsequently, the plan provides for an orderly, gradual, multi-year transition to reduce the national costs of universal service funding, while retaining maximum funding for highest cost areas and allowing (but not mandating)

² A service provider may practice avoidance and exploitation at the same time; e.g., a service provider may sell PRIs to dial-up Internet service providers in order to maximize its IC receipts, while simultaneously terminating VoIP traffic over PRIs it purchases from another service provider, in order to minimize its IC payments.

UNIVERSAL TELECOMMUNICATIONS FREEDOM (UTF) PLAN:

An Integrated & Comprehensive Reform Proposal

service providers to flexibly and rationally flow the impacts of such reductions through to end users in a corresponding gradual process.

A major goal in developing the UTF plan was to avoid creating any favorable or unfair bias toward any technology or industry segment, and to address the following objectives:

- Avoids Piecemeal Solutions – Each of the three components in this plan works best in concert with the other two. Intercarrier Compensation should not be resolved without USF reform and regulatory relief. Attempts to resolve any of the three components individually may result in unintended consequences and competitive imbalances far worse than the problems such efforts would seek to address.
- Technology Neutral – This plan eschews “carve-outs” and special provisions aimed at specific segments, technologies or service providers. Instead, this plan proposes a universal approach with clear, simple to understand rules and incentives to stabilize and rationalize the industry.
- Market-Based Competition – This plan eliminates stifling and unnecessary regulations which have harmed competition and limited the delivery of free market benefits to consumers.
- Maintains Consumer Interests – This plan directly and unambiguously steers USF dollars toward the provision of advanced services, especially in rural high cost areas, while simultaneously ensuring that USF continues to support a ubiquitous and affordable basic service offering and new high speed connection services.
- Enables a Competitive Market for Transport and Transiting – The plan harnesses free market forces to ensure that investment in the basic infrastructure for transport and transiting, the very foundations of network interconnection, will be encouraged.
- Addresses Arbitrage – By creating a simple capacity-based compensation mechanism for all traffic types, the plan significantly diminishes arbitrage opportunities.
- Virtually Eliminates Intercarrier Disputes – By unifying, rationalizing and simplifying all forms of interconnection and compensation, the “friction” of intercarrier disputes, and the attendant costs, will be virtually eliminated.
- Economically Efficient Price Signals – This plan will ensure that accurate price signals are exchanged within the wholesale markets, by creating a sustainable, default uniform compensation mechanism. Companies will continue to have an obligation to pay other companies for the use of their networks. Proposals for mandatory bill & keep assume that all networks will eventually evolve uniform traffic patterns, and thus costs between networks will cancel. However, innovation always causes disruptions in existing patterns, and a plan which does not account for such disruptions could lead to the broad suppressing of innovative and consumer friendly activities.
- Predictability – This plan will ensure a much higher level of predictability in the basic “rules of the road” within the telecommunications industry, which will benefit all service providers and customers.

UNIVERSAL TELECOMMUNICATIONS FREEDOM (UTF) PLAN:

An Integrated & Comprehensive Reform Proposal

INTERCARRIER COMPENSATION REFORM

Under UTF, IC will be reformed through the creation of a default, unified, capacity-based intercarrier compensation and connectivity plan for *all* service providers to whose networks North American Number Plan (“NANP”) local number resources have been directly assigned in the LERG or LNP databases, regardless of the underlying network technology employed by such service provider. The UTF plan will completely replace and consolidate all existing arrangements for traffic exchange within the public switched telephone network (PSTN), including, but not necessarily limited to:

- Interstate Switched Access,
- Intrastate Switched Access,
- CLEC interconnection and Reciprocal Compensation,
- CMRS interconnection and Reciprocal Compensation,
- Tandem Switched Transport and Meet-Point Billing,
- Tandem Transiting,
- LATA toll terminating arrangements,
- EAS settlement arrangements, and
- Enhanced/Information Services access arrangements.³

The UTF proposal for intercarrier compensation reform is explicitly limited to interconnection for the exchange of traffic originated and terminated using NANP telephone number resources. The plan only establishes default terms for connectivity and compensation at the ultimate NANP addressing points, and does not create rights or obligations related to intermediate transmission except as prescribed in connection with Default Aggregation Node arrangements (as defined herein). Furthermore, the plan neither addresses nor applies to IP network peering arrangements. The UTF proposal for intercarrier compensation would only apply to an IP network to the extent that a platform in such network serves as a final addressing endpoint for a NANP telephone number, or to the extent that such network attempts to terminate traffic to a NANP telephone number on a separate network. In any case, UTF only establishes minimum default arrangements, and all service providers, regardless of technology or corporate heritage, are free to negotiate alternative interconnection and compensation arrangements.

Under UTF, IC will be reformed in a flash-cut, simultaneously with the conversion to the connections-based mechanisms for USF contribution and distribution, and with implementation of regulatory reform, as described in the following sections. However, it is anticipated that the flash-cut conversion to the UTF capacity-based IC regime will be preceded by a 3 month period during which service providers will render dual format bills for all intercarrier compensation,

³ Currently, Enhanced/Information Services providers use enduser access services to interconnect to the PSTN; e.g., Internet Service Providers (ISP) typically employ Primary Rate Interface-Integrated Services Digital Network (PRI-ISDN) lines for their provision of dial-up Internet access to endusers. Enhanced/Information Services were permitted to operate in this manner pursuant to federal exemption, which was predicated on the assumption that such emerging services should not be required to pay Switched Access rates which recovered implicit support revenue requirements. Under the UTF plan, intercarrier compensation rates will no longer recover such implicit support revenue requirements, thus the necessity for the federal exemption will be eliminated. Enhanced/Information Services providers will continue to be able to employ local access number (or 950-XXXX, toll-free, etc.) dialing arrangements, but as wholesale interconnection arrangements, not as enduser access services.

UNIVERSAL TELECOMMUNICATIONS FREEDOM (UTF) PLAN:

An Integrated & Comprehensive Reform Proposal

showing the amounts actually owed under the current system and the amounts which would be owed under the UTF regime.

RATIONALE

The UTF plan for IC reform is based on the following underlying rationale:

- Each service provider to whose network NANP local number resources have been directly assigned must in some manner exchange traffic with all other service providers.
- For any given traffic, the provider of the retail service associated with such traffic bears ultimate responsibility for ensuring the traffic is appropriately originated, routed and completed.⁴
- When service provider A directly terminates traffic to the network of service provider B, or utilizes a local access number⁵, 950-XXXX⁶, 1+⁷, 10-1X-XXXX⁸, 900-NXX-XXXX, or toll-free dialing arrangement to directly receive originating traffic from the network of service provider B, service provider A should compensate service provider B for use of the dedicated interface (port) which service provider A is using on service provider B's network.
- These transactions between service providers are purely wholesale in nature and should not be dictated by, nor inappropriately influence, the retail treatment of such traffic by any service provider.
- Insofar as service provider A must use a dedicated interface (port) on service provider B's network, the port provided by service provider B is not a discretionary service; rather, it is an element in an open public network, which must be exchanged between service providers, subject to a minimum fixed set of rules and procedures to ensure that all parties may operate fairly and equitably. Such rules and procedures should not be overly intrusive, but rather should be the bare minimums to ensure an open, sustainable, reliable and robust public communications system.
- As an element of exchange between service providers operating in an open public network, the default prices for these port interfaces should be established uniformly for all service providers nationwide. Beyond the reciprocal exchange aspect, uniform nationwide pricing of such interfaces is also appropriate because: (i) port costs are not inherently geographically variable⁹; (ii) switching technology is becoming increasingly granular, and on a forward-looking basis ports can be expected to reflect an increasingly linear cost scale; and (iii) to the extent large individual service providers may possess purchasing power advantages

⁴ This specifically includes a retail provider of dial-up services, such as Internet access.

⁵ The dialing arrangement currently utilized for Feature Group A access and for dial-up ISP services.

⁶ The dialing arrangement currently utilized for Feature Group B access.

⁷ The dialing arrangement currently utilized for Feature Group D access.

⁸ The dialing arrangement currently utilized for Feature Group D access.

⁹ Indeed, the physical location of a port and the location of the bulk of the network served by the port may be wholly distinct. For example, CLEC and CMRS providers typically install large central switching platforms which may serve enduser locations separated by hundreds of miles; likewise, some rural ILECs employ a small number of host switches, subtended by large numbers of remote devices, in order to serve multiple geographically disparate areas.

UNIVERSAL TELECOMMUNICATIONS FREEDOM (UTF) PLAN:

An Integrated & Comprehensive Reform Proposal

over smaller individual service providers, small service providers may be able to mitigate such advantages by employing joint purchase arrangements or platform sharing.

- Conversely, however, the costs of fixed transmission facilities (i.e., transport) are inherently geographically variable. Hence, service providers should be wholly free to price transport to reflect market conditions.
- In addition to the default rules and procedures, each service provider should be free to negotiate or offer any optional terms it may choose, provided that such optional terms are offered on a non-discriminatory basis and do not impair the default terms.

PRINCIPLES

The UTF IC reform plan is intended to satisfy the following underlying principles and objectives:

- technologically neutral interconnection;
- efficient capital deployment and efficient use of facilities among carriers;
- an efficient, competitive free market for transport;
- allow for the routing and termination of all forms of traffic, with minimal use of segregated trunk groups, and without need to track or separately bill traffic by political jurisdiction, calling area, carrier type or traffic type; and
- prohibit a service provider from inappropriately shifting the costs of its own inefficiency to others, or from confiscating the benefits of other service providers' efficiencies.

ARCHITECTURE & COMPENSATION

Under the UTF plan for IC reform, the default point(s) of interconnection (POI) in each network shall be each Intercarrier Access Node (IAN) deployed in such network. An IAN is any network device:

- (1) to which the NANP telephone number associated with an enduser's service in a given service provider's network is homed; and
- (2) to which other carriers may directly interconnect via inter-machine facilities, in order to terminate traffic to, or, through use of a local access number, 950-XXXX, 1+, 10-1X-XXXX, 900-NXX-XXXX, or Toll-Free dialing arrangement, to originate traffic from such enduser.

In a traditional, Time Division Multiplexed (TDM), circuit-switched network, an IAN would be a Class 5 switch (e.g., DMS 100, 5ESS), but not a hosted remote device which is incapable of unaffiliated inter-machine connections. In a non-traditional, Internet Protocol (IP), packet-switched network, an IAN would be the inter-machine Gateway(s) to which are homed (via direct LERG or LNP database assignment) the telephone numbers associated with enduser services provided by that network.

UNIVERSAL TELECOMMUNICATIONS FREEDOM (UTF) PLAN:

An Integrated & Comprehensive Reform Proposal

A service provider shall be free to establish additional POIs at which other parties may terminate or originate traffic, but may not offer such additional POIs in lieu of the default POI at each IAN in its network. Such additional POIs may be offered under whatever terms or conditions the service provider may choose, provided that such terms and conditions shall be offered on a non-discriminatory basis to all other service providers. In order to guarantee that any particular inbound traffic to its network is accorded "local/EAS" retail pricing by other service providers, a service provider will need to establish additional POIs within each local/EAS calling area of each other service provider from which areas it wishes such traffic to be accorded such treatment, and enable such other service providers to deliver such traffic to such POI as if the POI was the IAN to which such traffic is homed.¹⁰ These default conditions notwithstanding, two or more service providers may negotiate alternative POI locations and retail calling treatments for traffic exchanged between their networks, provided that such terms are offered to other service providers on a non-discriminatory basis.

Under UTF, each service provider offering retail local/EAS calling shall bill its end users under its local/EAS calling structure for all traffic which the service provider is able to deliver to the terminating service provider's network at a POI located within the originating service provider's defined local/EAS calling area; where no such POI is located within the originating service provider's defined local/EAS calling area, the originating service provider may bill such traffic according to its non-local/EAS calling structure which may otherwise apply. Under UTF, each service provider shall have full discretion to bill its end users for calls based on the location of the nearest POI at which such traffic may be physically handed off to the terminating service provider's network, rather than according to the Rate Centers associated with the dialed telephone numbers; provided that a service provider must bill traffic to all other service providers' networks on a consistent basis and may not unfairly discriminate between service providers.

The architecture of UTF is composed of three elements: (1) ports, (2) transport, and (3) transiting. On each IAN in its network, a service provider shall make available ports to other service providers upon request, in order that such other service providers may terminate traffic to, or through use of a local access number, 950-XXXX, 1+, 10-1X-XXXX, 900-NXX-XXXX, or Toll-Free dialing arrangement, originate traffic from such IAN. Each service provider purchasing IAN ports shall arrange and maintain sufficient transport between its network and each of the IAN ports it purchases, as well as arrange and maintain sufficient transiting arrangements for traffic to IANs from which it does not directly purchase ports. UTF sets default terms governing the provision of Ports, and provides for the total deregulation of Transport and Transiting, except for DAN Transiting, as described below.

Ports

- Each IAN owner shall make available to all other service providers, at each IAN in its network:

¹⁰ Each service provider will be free to establish its own retail local/EAS calling areas, provided that it will accord such retail pricing to any retail calls originated from its network to any separate network which makes a POI available for termination of such calls within the service provider's defined retail local/EAS calling area. It is not relevant whether the originating service provider actually hands-off the traffic at such POI; rather, the originating service provider must bill its end users under its local/EAS calling structure to the extent the terminating network makes adequate POI capacity available within the originating service provider's local/EAS calling area.

UNIVERSAL TELECOMMUNICATIONS FREEDOM (UTF) PLAN:

An Integrated & Comprehensive Reform Proposal

- DS1 level TDM ports.
- DS3 level TDM ports, where: (i) such ports were actually provided at the given IAN device at the time of conversion to the UTF plan, or (ii) the IAN device was deployed after the date of conversion to the UTF plan.
- DS0 level TDM ports, where such ports were actually provided at a given IAN device at the time of conversion to the UTF plan, until such time as the particular device is retired.
- A service provider which purchases a port from an IAN provider may require the IAN provider to establish such port as either:
 - a one-way port only for termination of traffic; or
 - a one-way port only for origination of traffic via a local access number, 950-XXXX, 1+, 10-1X-XXXX, 900-NXX-XXXX, or Toll Free dialing arrangement; or
 - a two-way port for both termination of traffic, as well as for origination of traffic via a local access number, 950-XXXX, 1+, 10-1X-XXXX, 900-NXX-XXXX, or Toll Free dialing arrangement.
- At any given IAN, an IAN provider may offer port options other than the types or configurations mandated above, provided that such optional offerings do not impair or limit its ability to satisfy demand for the mandated types, and are made available to other parties on a non-discriminatory basis.¹¹
- Compensation applying to TDM ports purchased from any IAN (including IAN ports purchased by a DAN provider, as described below) shall be as follows:
 - Default nationwide, uniform, flat monthly rate per interface-level to apply to all providers and networks, assessed per mandated port type. Optional port offerings shall be priced subject to mutual agreement of the provider and purchaser.

¹¹ For example, two service providers who would otherwise purchase separate IAN ports from one another, may mutually agree to establish a single set of IAN ports in order to route between their networks any combination of the following traffic types: (i) Terminating traffic from service provider A to service provider B; (ii) Terminating traffic from service provider B to service provider A; (iii) Originating traffic from provider A's IAN via a Local Access Number, 950-XXXX, 1+, 10-1X-XXXX, 900-NXX-XXXX, or Toll Free dialing arrangement; and (iv) Originating traffic from provider B's IAN via a Local Access Number, 950-XXXX, 1+, 10-1X-XXXX, 900-NXX-XXXX, or Toll Free dialing arrangement. Similarly, two service providers utilizing IP-based platforms, might agree to provision native IP interfaces between their two networks, or even to exchange traffic between their platforms via the Public Internet or a third-party IP network.

UNIVERSAL TELECOMMUNICATIONS FREEDOM (UTF) PLAN:

An Integrated & Comprehensive Reform Proposal

- The following initial default monthly port rates for mandatory TDM ports are proposed, based on a proxy monthly DS0 capacity of 9,250 minutes multiplied by a proxy per minute termination rate of \$0.002 plus a cross-connect allowance¹²:

TDM Interface	Proxy Monthly MOU	Interface Allowance	X-Connect Allowance	Combined Price
DS0	9,250	\$ 18.50	\$ 0.25	\$ 18.75
DS1	222,000	\$ 444.00	\$ 2.00	\$ 446.00
DS3	6,216,000	\$ 12,432.00	\$ 45.00	\$ 12,477.00

- These proposed monthly port rates are validated on at least two criteria:
 1. The proposed port rates satisfy the objective identified by Home Telephone Company, Inc. and PBT Telecom in their intercarrier compensation proposal – that intercarrier compensation rates be set comparable to standard retail enduser rates, in order to economically discourage inappropriate use of retail enduser access services for purposes of originating or terminating intercarrier traffic. These proposed rates are roughly comparable to the loaded market prices¹³ for Primary Rate Interface-Integrated Services Digital Network (PRI-ISDN) nationwide. Today, PRI services are widely employed by Enhanced/Information Service Providers and VoIP operators in lieu of wholesale network interconnection arrangements; thus, pegging port rates close to those existing rates will both limit “sticker shock” for those providers and limit incentives for any providers to inappropriately employ retail services.
 2. The proposed port rates are built up from a proxy per minute termination rate of \$0.002, which has emerged through the NARUC process as the consensus estimate of state regulators for a nationally applicable rate for termination. As any per minute “cost” is merely an allocation of fixed (interface) costs among minutes, it is reasonable to build that proposed rate into a flat monthly capacity-based rate.
- Service providers may negotiate optional lower rates (including bill & keep) for ports they lease to one another, provided that they make those same rates available to other service providers on a non-discriminatory basis.
- Every four (4) years, the FCC shall review, and as necessary, revise the default port rates.

Transport

- As used herein, the term “transport” refers solely to interoffice/intercarrier transmission facilities (whether landline, wireless, or other) and does not refer to nor include any tandem or transit switching, routing or aggregation functionality.

¹² The cross-connect allowance shall compensate the IAN provider for connectivity between the port and the transport distribution frame or collocation bay.

¹³ This would include the local PRI port rate, the PRI SLC rate as well as the federal PRI port rate.

UNIVERSAL TELECOMMUNICATIONS FREEDOM (UTF) PLAN:

An Integrated & Comprehensive Reform Proposal

- All transport shall be wholly deregulated.
- In order to ensure a functionally efficient transport market, all IAN providers shall be required to provide cage-less collocation at each IAN/POI location they operate, to all other fiber or microwave transport providers, at a uniform monthly default rate per bay, to be determined by regulators. Such collocation shall be available only for the purpose of interconnecting to IAN ports, and shall not be used for interconnecting to unbundled network elements or to transport services, unless the IAN provider is separately required to allow collocation in its network for such purposes.¹⁴

Transiting

- As used herein, the term “transiting” refers to a wholesale traffic aggregation service which is offered to enable service providers to indirectly connect to multiple IANs (which may be affiliated or unaffiliated with the transiting provider) via a single logical transmission path. Under the UTF plan, transiting replaces all “tandem switching”, “tandem switched transport”¹⁵, “CLEC/CMRS transiting”, “common transport” or similar arrangements.
- Under the UTF plan, transiting service shall:
 - not resemble existing tandem switched transport arrangements whereby a tandem provider and an end office provider jointly provision access to an IXC, with the tandem provider and end office provider each billing the IXC for specific access elements pursuant to a meet-point billing arrangement;
 - not resemble existing CLEC transiting and ILEC intraLATA termination arrangements whereby a tandem provider bills a 3rd party LEC or CMRS for either “common transport” or “tandem transiting”, and the end office provider bills the 3rd party LEC or CMRS for either switched access or reciprocal compensation termination;
 - resemble certain wholesale long distance arrangements, whereby wholesale LD provider A sells to LD provider B, a wholesale termination/origination service to various points with no separate billing of charges by the ultimate terminating/originating LECs to LD provider B.
- Transiting providers shall be exclusively responsible for recovering any port or transport costs which they may incur in the course of providing transiting services, solely through the rates they charge for such transiting services. As meet-point billing type arrangements shall not apply to transiting, IAN providers shall only bill charges to the transiting provider who is the direct port group purchaser, and shall not be required to: (i) apportion port (or transport) charges, (ii) separately bill third parties for port (or transport) charges, or (iii) provide any additional signaling or detail information to the transiting provider which the IAN provider is not otherwise required to provide to any other purchaser of IAN ports.

¹⁴ For example, an ILEC’s rural exemption for general collocation, UNE and other requirements would remain intact even if a competitor collocated in its facilities for the purpose of interconnection to IAN ports under the UTF plan.

¹⁵ This covers both the situation where the tandem provider and end office provider are separate companies, and the situation where the tandem provider and end office provider are the same company.

UNIVERSAL TELECOMMUNICATIONS FREEDOM (UTF) PLAN:

An Integrated & Comprehensive Reform Proposal

- A Transiting provider shall purchase ports from IAN providers on the same basis as all other port purchasers, and shall be exclusively responsible for arranging transport between its network and the IANs to which it connects.
- Except for connectivity to any IAN to which fewer than three (3) wholly separate and unaffiliated service providers have purchased and interconnected to wholly separate port groups, all transiting functionality shall be wholly deregulated.
- For IANs to which fewer than three (3) wholly unaffiliated service providers have purchased and interconnected to wholly separate port groups, an open bidding process shall be established to designate a provider of a Default Aggregation Node (DAN) by which transiting functionality between such IANs and all other service providers operating within a defined geographic area shall be guaranteed, so that such other service providers may terminate traffic to, or through utilization of a local access number, 950-XXXX, 1+, 10-1X-XXXX, 900-NXX-XXXX, or Toll-Free dialing arrangement originate traffic from such IANs. A DAN may be a traditional TDM circuit switch (e.g., DMS 200/250, 4ESS, 5ESS, etc.) or a non-traditional packet switch/router (inter-machine trunking gateway) or other type of device providing the same functionality.
- As part of the initial conversion to this capacity-based intercarrier compensation regime, all IANs to which fewer than three (3) wholly unaffiliated port groups do not exist shall be identified and associated with a geographic DAN district. Each DAN district will be subject to a unique DAN bidding process. Each ILEC currently operating an access tandem shall be required to participate in the initial bidding process for the geographic district in which such tandem is located (but it is anticipated that other service providers will also bid).
 - Each bidder will propose terms whereby such bidder will offer to provide transiting to each of the IANs with fewer than three (3) wholly separate port groups, within a given district.
 - The bidder shall be free to set the terms of its bid, provided that such bid does not require billing of service by the IAN provider to any entity other than the DAN provider, and provided that such bid includes provision of TDM DS1 and DS3 interfaces.
 - Each bidder may, at its own discretion, specify fixed rates, a formula by which it will set or adjust rates over time, or any combination thereof.
 - The winning bidder shall receive a concession for a period of 4 years, during which it shall provide transiting service to the designated IANs according to the terms of its bid (it may offer additional optional terms on a non-discriminatory basis). The DAN provider's provision of such transiting service shall be regulated only according to the terms of its bid, and shall be wholly deregulated in all other respects (e.g., such service will not be otherwise regulated by the FCC or PUC).
 - The bidding process shall be repeated every four years, with the outgoing DAN provider required to participate in the subsequent bid round.

UNIVERSAL TELECOMMUNICATIONS FREEDOM (UTF) PLAN:

An Integrated & Comprehensive Reform Proposal

- Winning bids shall be chosen according to a set of objectively verifiable criteria which shall be determined and publicly disclosed before any bids are submitted.

- Each IAN provider may purchase transiting from each DAN provider on the same basis as any other service provider. However, for any IAN to which fewer than three (3) wholly unaffiliated service providers have purchased and interconnected to wholly separate port groups, the DAN provider serving such IAN shall provide transiting to the IAN provider on a most-favored-nation basis, such that the IAN provider may purchase transiting from that IAN on the best terms offered by the DAN to any other entity for transiting within that DAN district, except that the IAN provider shall not be required to meet any volume or term commitments which the DAN may have required of the other entity. The DAN shall not be required to extend such terms minus the volume and term commitments to any other parties.

UNIVERSAL TELECOMMUNICATIONS FREEDOM (UTF) PLAN:

An Integrated & Comprehensive Reform Proposal

UNIVERSAL SERVICE FUND REFORM & INTERCARRIER REPLACEMENT

Under UTF, USF will be reformed, and intercarrier compensation reduced under this plan will be replaced, through the creation of rational contribution and disbursement systems which shall apply equally to all eligible service providers, but with specialized treatments to account for rural/non-rural differences. A broader, fairer, and fundamentally more sustainable contribution system, and a more rational and precisely targeted distribution system will align USF and intercarrier replacement programs with longstanding USF public policy objectives, translated to and made consistent with the broadband goals and competitive realities of the twenty-first century.

Under UTF, contribution and distribution mechanisms will be reformed in a flash-cut simultaneously with the intercarrier compensation reform described in the preceding section and the regulatory reform discussed in the following section. Subsequent reductions in support will be implemented in a gradual, predictable multi-year process designed to minimize enduser rate increases.

RATIONALE

The UTF plan for USF reform and intercarrier replacement is based on the following rationale and principles:

- The goal of Universal Service should be to ensure that each American has affordable access (i.e., “connectivity”) to a public network by which s/he may electronically correspond or interact in real-time with any other user of any public network.
- As the value to any user of any public network is increased by the addition of other users to such network, funding for Universal Service programs should be as broad as economically possible and reasonable.
- Because the rapid development and convergence of services can be expected to blur distinctions between the activities we currently refer to as electronic communications, content and commerce, revenue-based funding mechanisms will be unreliable and difficult to maintain.
- Likewise, because activities which do not rely on telephone numbers already serve as direct competitors and substitutes for services which do rely on telephone numbers, telephone number-based funding mechanisms will be inherently unreliable and unfair.
- Conversely, a mechanism which ties directly to the basic connectivity (bandwidth) provided to each enduser will not suffer from these infirmities and can be expected to provide a stable, easily maintained and predictable funding source. Because enduser connections which do not attach to a public network nonetheless compete with enduser connections which do connect to a public network and frequently are only useful to their users because of the separate availability of such public networks, such non-public network connections should be included within the funding base for USF, but should be ineligible for USF funding.
- USF support should encourage the deployment and purchase of advanced, high bandwidth connectivity to public networks, especially in rural areas.

UNIVERSAL TELECOMMUNICATIONS FREEDOM (UTF) PLAN:

An Integrated & Comprehensive Reform Proposal

- Intercarrier compensation replacement should be differentiated to reflect the different cost characteristics and competitive environments between non-rural and rural areas.
 - In non-rural areas, intercarrier compensation has already been reduced to relatively low levels. Owing to low costs and aggressive competition for both residential and business services in such areas, long-term replacement of intercarrier compensation is not required. Rather, conditions in such markets allow for full transition of intercarrier compensation revenues reduced under this plan within five years, provided that the transition mechanism provides all service providers reasonable opportunities to adjust their business models.
 - In rural areas, intercarrier compensation remains at high levels and is directly required to support service availability and affordable prices. Because rural intercarrier compensation directly supports the maintenance of “last resort” networks and the obligation-to-serve, rural intercarrier compensation replacement should be addressed via a long-term support mechanism. Such mechanism should be specifically targeted to support the additional costs a service provider incurs in order to maintain a “last resort” network by which a basic level of service may be guaranteed to all residential users on a ubiquitous basis. Eligibility for such support should be tied directly to a service provider’s willingness and ability to offer such basic residential service, and the criteria pertaining to such eligibility should be uniform for all service providers.

CONNECTION-BASED CONTRIBUTION MECHANISM

1. All USF programs¹⁶ and intercarrier replacement mechanisms should be funded via a single flat charge per end-user connection. All connections should be assessed, be they wireless or wireline, duplex or non-duplex, symmetric or asymmetric, switched or non-switched, whether connected to public or private networks. The amount of the charge should vary based on the two-way average bandwidth of the connection being assessed. Assessed end-user connections would include, but not necessarily be limited to: POTS, DSL, Private Line, Special Access, CMRS, Point-to-Point wireless or microwave, DBS, CATV, Cable Modem.
2. Non-digital (e.g., analog CATV, analog CMRS) connections should be assessed according to a digital-to-analog bandwidth equivalency factor.
3. No assessment shall apply to any services provided over an enduser connection.
4. The bandwidth-based charge per end-user connection should be established in a simple step mechanism, with fixed maximums to ensure that no end-user connection receives an unfair or unreasonable assessment. For example, the bandwidth of each connection could be assessed according to a bandwidth factor based on whole number multiples of 256 kbps, with a maximum assessed bandwidth of 2 Mbps per connection, and a maximum per

¹⁶ It is preferred that school, library, hospital and low-income support programs be funded from general government revenues; however to the extent that such programs continue to be funded via the industry, they should be funded via this same connection-based contribution mechanism.

UNIVERSAL TELECOMMUNICATIONS FREEDOM (UTF) PLAN:
An Integrated & Comprehensive Reform Proposal

connection charge of \$2.99 per month. Under the UTF plan, the total initial USF and intercarrier replacement funding could be expected to rise from the current \$3.5B to a best case of \$5B and a worst case of \$7B. Based on those estimates, the step mechanism described in this paragraph would result in the connection-based charges shown in Examples 1 and 2 below. By banding the charges and limiting the maximum amount of the charges, the UTF plan will ensure that such charges do not artificially impact consumer purchase decisions (e.g., the difference between a POTS charge of \$0.34 and a DS1 charge of \$2.04, is unlikely to cause a business subscriber to purchase a DS1 in lieu of multiple POTS lines, or vice versa). Likewise, the \$2.99 limit on the maximum charge per connection ensures that the contribution mechanism will not undermine those aspects of the distribution mechanisms which are intended to encourage free market investment in, and purchase of high speed connection services.

CONNECTION-BASED CONTRIBUTION MECHANISM							
					Maximum Monthly Charge	\$	2.99
					Kbps Factor		256
Example 1							
Connection Type	Quantity	Kbps Proxy	Factor Multiples	Monthly Charge	Monthly Collections	Annual Collections	
VGE Access Lines	160,000,000	64	1	\$ 0.34	\$ 54,400,000	\$ 652,800,000	
DSL Lines	16,300,000	1,500	6	\$ 2.04	\$ 33,252,000	\$ 399,024,000	
Cable Modem	23,000,000	1,500	6	\$ 2.04	\$ 46,920,000	\$ 563,040,000	
CATV/DBS Subscriptions	85,400,000	2,000	8	\$ 2.72	\$ 232,288,000	\$ 2,787,456,000	
CMRS Subscriptions	170,000,000	64	1	\$ 0.34	\$ 57,800,000	\$ 693,600,000	
Channel Terminations	1,000,000	1,544	6	\$ 2.04	\$ 2,040,000	\$ 24,480,000	
Totals	455,700,000				\$ 426,700,000	\$ 5,120,400,000	
Example 2							
Connection Type	Quantity	Kbps Proxy	Factor Multiples	Monthly Charge	Monthly Collections	Annual Collections	
VGE Access Lines	160,000,000	64	1	\$ 0.63	\$ 100,800,000	\$ 1,209,600,000	
DSL Lines	16,300,000	1,500	6	\$ 2.99	\$ 48,737,000	\$ 584,844,000	
Cable Modem	23,000,000	1,500	6	\$ 2.99	\$ 68,770,000	\$ 825,240,000	
CATV/DBS Subscriptions	85,400,000	2,000	8	\$ 2.99	\$ 255,346,000	\$ 3,064,152,000	
CMRS Subscriptions	170,000,000	64	1	\$ 0.63	\$ 107,100,000	\$ 1,285,200,000	
Channel Terminations	1,000,000	1,544	6	\$ 2.99	\$ 2,990,000	\$ 35,880,000	
Totals	455,700,000				\$ 583,743,000	\$ 7,004,916,000	

5. The bandwidth factor assessment should be adjusted each quarter, to ensure full funding of all USF program and intercarrier compensation replacement requirements.

USF CALCULATION & DISTRIBUTION

1. Re-base the High Cost Loop support in each ILEC study area which receives such support, to the frozen national average loop cost of \$240.
2. For each ILEC Study Area, calculate the Consolidated Support Revenue Requirement (CSRR) by summing the total disbursements of the five (5) existing service provider support

UNIVERSAL TELECOMMUNICATIONS FREEDOM (UTF) PLAN:

An Integrated & Comprehensive Reform Proposal

programs (High Cost Loop, Long Term Support, Local Switching Support, Interstate Access Support and Interstate Common Line Support).

3. Economically disaggregate the CSRR in each Study Area to the individual exchanges within the Study Area based on a forward-looking proxy cost model according to relative cost characteristics.
4. Distribute the exchange-specific CSRR in each exchange via a single mechanism, the Residential Connection Support Fund, as follows:
 - a. Available for provision of duplex communications-capable¹⁷ connections to residential premises in an exchange, on a per connection basis. Basic telephone lines, wireless "lines", DSL and cable modem qualify, but NOT CATV or DBS, which are not communications-capable connections, and not VoIP, video content or online services, since support flows to the connection, not the services provided over the connection. Support in each exchange will be limited to service providers qualified as certified eligible telecommunications carriers (CETC) within each exchange.
 - b. Support per connection should be paid (to the service provider) as a flat amount per residential communications-capable connection based on the bandwidth of the connection, with analog connections compensated according to a digital-to-analog equivalency factor. The distribution mechanism should be banded in a fashion analogous to that which was prescribed above in reference to the revised USF contribution mechanism.
 - c. Wireless connections should be compensated based on proportional cell tower capacity in an exchange. On a quarterly basis, each provider's cell tower capacity in the exchange area will be quantified as a percentage of total industry cell tower capacity nationwide. The wireless provider's support amount will be calculated by multiplying its exchange cell tower percentage by the total wireless telephones in service nationwide, prorated between wireless voice and wireless broadband based on national totals.
5. The exchange-specific CSRR shall be capped upon conversion to the UTF plan. As the number and bandwidth of eligible connections in each exchange increases, the support amount per kbps band will decrease, so that total support within each exchange – and for the entire USF system -- shall not increase.

NON-RURAL INTERCARRIER REPLACEMENT CALCULATION & DISTRIBUTION

1. In non-rural¹⁸ Study Areas, each service provider which received intercarrier compensation revenues pursuant to filed and effective intrastate or interstate access tariffs, filed and effective interconnection agreements, formal originating responsibility plans or agreements,

¹⁷ These are connections to either the Public Switched Telephone Network (PSTN) or to the Public Internet, but not to private networks (whether IP or TDM) which do not allow the enduser unfettered access to either the PSTN or the Public Internet.

¹⁸ Defined as a Study Area served by an ILEC which does not currently qualify as a Rural Telephone Company under Title 1, Section 3 of the Communications Act of 1934, as Amended by the Telecommunications Act of 1996.

UNIVERSAL TELECOMMUNICATIONS FREEDOM (UTF) PLAN:

An Integrated & Comprehensive Reform Proposal

or formal EAS settlement plans or agreements, for at least the 18 consecutive months immediately prior to the date of conversion to the UTF plan, shall be allowed to transitionally recover lost intercarrier revenues pursuant to the Inter-carrier Compensation Transitional Replacement (ICTR) mechanism which shall be funded via the connections-based funding mechanism described above.

2. Each service provider qualifying for ICTR shall quantify, pursuant to the formula shown below and subject to audit, the total eligible intercarrier compensation revenues it received during the 12 consecutive months ending 6 months prior to the date of conversion to the UTF plan, net of the total intercarrier compensation it would have received during that same period under the UTF compensation structure. The average monthly amount of eligible intercarrier compensation received by a service provider during that period shall be that service provider's unique ICTR allowance.

$$\text{ICTR Allowance} = ((a - b) - (c - d) + e)/12$$

where:

- a = Non-transport IC revenues actually received during period
- b = Non-transport IC revenues which would have been received if UTF applied
- c = Non-transport IC expenses for Local/EAS¹⁹ traffic actually incurred during period
- d = Non-transport IC expenses for Local/EAS traffic which would have been incurred if UTF applied
- e = Any existing state universal service support attributable to recovery of intrastate access reductions²⁰

3. Upon conversion to UTF, each qualifying service provider shall receive monthly ICTR payments as follows:
 - 1st through 12th months = 100% of its ICTR allowance
 - 13th through 24th months = 95% of its ICTR allowance
 - 25th through 36th months = 85% of its ICTR allowance
 - 37th through 48th months = 65% of its ICTR allowance
 - 49th through 60th months = 35% of its ICTR allowance
 - 61st month and beyond = 0% of its ICTR allowance

RURAL INTERCARRIER REPLACEMENT CALCULATION & DISTRIBUTION

1. In each rural²¹ Study Area, intercarrier compensation shall be replaced by disbursements from the Carrier of Last Resort (CoLR) Network Support fund, which shall be funded via the connections-based funding mechanism described above.

¹⁹ Impacts on each service provider's IC expense associated with traffic other than Local/EAS are excluded since the market will directly factor such expense reductions into reduced enduser rates.

²⁰ Upon conversion, these preexisting state replacement programs should be terminated. Any state universal service funds not attributable to recovery of access reductions would remain the responsibility of the state to manage and to fund from companies/customers solely within that state

²¹ Defined as a Study Area served by an ILEC which currently qualifies as a Rural Telephone Company under Title 1, Section 3 of the Communications Act of 1934, as Amended by the Telecommunications Act of 1996.

UNIVERSAL TELECOMMUNICATIONS FREEDOM (UTF) PLAN:

An Integrated & Comprehensive Reform Proposal

2. The total CoLR Disbursement in each rural Study Area shall be calculated at the time of conversion to UTF, based solely on the net impacts of intercarrier compensation reform on the ILEC²² operating in such Study Area, using the formula and methodology prescribed above for the calculation of non-rural ICTR allowances.
3. The CoLR Disbursement in each rural Study Area shall be disaggregated to the individual exchanges within the Study Area pursuant to the same methodology employed to disaggregate the CSRR in that Study Area.
4. The exchange-specific CoLR Disbursement shall be paid out on the same bandwidth basis and for the same communications-capable residential connections as support paid under the Residential Connection Support Fund, but only to service providers which fulfill Carrier of Last Resort (CoLR) responsibility within the exchange.
5. CoLR responsibility shall apply equally to all CoLR Network Support Fund recipients, and no recipient shall be regulated any more heavily than any other recipient.
6. CoLR responsibility shall be defined as the service requirements imposed on the ILEC at time of conversion with respect to the offering of a basic voice telephone service meeting the following criteria:
 - a. offered ubiquitously, to every household within an exchange,
 - b. stand-alone offering,
 - c. full backup power for the minimum period of hours currently required of the ILEC,
 - d. full 911/E911, CALEA and other public safety compliance,
 - e. full call signaling compliance,
 - f. the ability to place and receive calls to any PSTN telephone number,
 - g. toll and LD equal access,
 - h. same consumer protection requirements (billing, invoicing, disconnect rules, etc.) as the ILEC, and
 - i. maximum price, calling scope, sound quality and availability required of the ILEC.
7. CoLR and IC requirements shall be the sole regulatory requirements imposed on any service provider.
8. The exchange-specific CoLR Disbursement shall be capped upon conversion to the UTF plan. As the number and bandwidth of eligible connections in each exchange increases, the support amount per kbps band will decrease, so that total support within each exchange – and for the entire USF system -- shall not increase.
9. The exchange-specific CoLR Disbursement shall be annually reduced by 2% from the initial base year level in each exchange for 5 years starting the second year after conversion (for a 10% cumulative reduction from the initial base year level in year 6). In this manner total support nationwide will be reduced, but at a pace and in an amount reflective of the necessity to maintain rural last resort networks.

²² The CoLR Network Support Fund disbursement is based solely on the ILEC impacts, owing to the fact that currently only ILECs operate and maintain last resort networks.

UNIVERSAL TELECOMMUNICATIONS FREEDOM (UTF) PLAN:

An Integrated & Comprehensive Reform Proposal

10. As support is reduced, all service providers shall be free to fully recover lost support through enduser rate increases (including a proportional increase in the maximum price of CoLR R1 service).

UNIVERSAL TELECOMMUNICATIONS FREEDOM (UTF) PLAN:

An Integrated & Comprehensive Reform Proposal

REGULATORY REFORM

The national initiative to introduce competition into the telecommunications industry which began in the mid-1970s, and saw milestones in the divestiture of the Bell System in 1983, and passage of the Telecommunications Act of 1996, has, after nearly three decades, finally reached its climax in the early 21st century. Virtually every service in virtually every market faces some form of robust competition, and all services are effectively contestable in all markets. As in every industry and market, competition and contestability are admittedly imperfect; however, the telecommunications industry is arguably much more open and competitive today than was the US auto industry in 1960, the computer industry in 1970, or even the airline industry of today.²³ Those industries and markets secured consumer welfare without resort to invasive economic regulation, and the telecommunications industry has already shown that it can do the same.

The UTF plan is designed to release and take advantage of market forces to regulate and secure the highest possible consumer welfare in the telecommunications industry, in much the same way as those forces regulate and secure virtually every other industry and market in America. Without the regulatory relief specified in the plan, the free market forces upon which the UTF plan depends may not fully operate, and the benefits of the plan may not be fully realized. The plan requires complete economic and administrative deregulation²⁴ of all service providers, except for:

- basic elements of default intercarrier connectivity and compensation arrangements, pursuant to IC reform; and
- basic, stand-alone, rural residential telephone service, the offering of which will qualify a service provider to receive rural intercarrier compensation replacement support, pursuant to USF reform.

General public safety, commercial and consumer protection requirements will continue to apply to telecommunications, as they do to all other industries. Additionally, public safety, technical standards and national security regulations specific to the telecommunications industry will also continue to apply. Finally, certain other telecommunications-specific regulations will apply with respect to basic residential services eligible for supplemental USF support, pursuant to USF reform.

Under UTF, the regulatory reform discussed here will occur up front, simultaneously with the conversion to the UTF intercarrier compensation regime and with the conversion to the UTF connections-based mechanisms for USF contribution and distribution.

²³ In 1960, three domestic manufacturers totally dominated the US auto industry, and in most rural markets a single make dealership was the only choice; in 1970 IBM was virtually unchallenged in the global computer industry; and in the airline industry of today, like the telecom industry, all but the smallest markets have robust intra-modal competition, while in smaller markets, commuter airlines face intermodal competition from private/charter aircraft, automobiles, mass transit and even telecommunications. More importantly, the dominance of the leading providers in all three industries at any single point in time has proven at best temporary as innovation, technology and competition have reordered those industries several times in the past decade alone.

²⁴ Economic and administrative deregulation refers to the elimination of pricing, earnings, reporting and tariffing regulation at the federal and state levels.