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**frontier**  
A Citizens Communications Company

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May 10, 2005

Ms. Mariene Dortch  
Office of the Secretary  
Federal Communications Commission  
445 12th Street, S. W.  
Washington, DC 20554

**Re: Developing a Unified Intercarrier Compensation Regime CC Docket No. 01-92  
Ex Parte Presentation**

Dear Ms. Dortch:

In accordance with Section 1.1206 of the Commission's rules, 47 C.F.R. §1.1206, Frontier, a Citizens Communications Company, offers notice of ex parte contacts made May 9, 2005. The attached Universal Telecommunications Freedom Plan, Summary, Diagrams and cover letter were delivered via email to each of the Commissioners, their assistants and to the Chief of the Wireline Competition Bureau.

Please acknowledge receipt via email. Thank you.

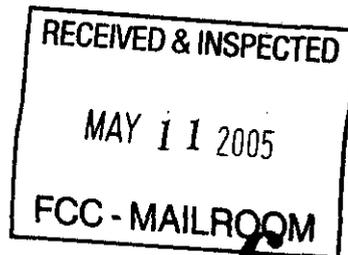
Sincerely,



Alex J. Harris  
Vice President-Regulatory

Enclosures

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**EX PARTE PRESENTATION**  
**Delivered Via Electronic Mail**

May 9, 2005

The Honorable Kevin Martin  
Chairman  
Federal Communications Commission  
445 12th Street, SW  
Washington, DC 20554

The Honorable Michael Copps  
Commissioner  
Federal Communications Commission  
445 12th Street, SW  
Washington, DC 20554

The Honorable Kathleen Q. Abernathy  
Commissioner  
Federal Communications Commission  
445 12th Street, SW  
Washington, DC 20554

The Honorable Jonathan Adelstein  
Commissioner  
Federal Communications Commission  
445 12th Street, SW  
Washington, DC 20554

**Re: Developing a Unified Intercarrier Compensation Regime CC Docket No. 01-92**

Dear Commissioners:

Frontier, A Citizens Communications Company, submits the attached Universal Telecommunications Freedom (UTF) plan for your consideration with regard to intercarrier compensation, universal service reform and regulatory reform. This comprehensive reform proposal was developed with the goal of freeing market forces in order to drive greater industry stability, sustainability and consumer benefits. UTF is simple and straightforward in concept, but has been developed to a high degree of detail and specificity in critical areas.

Frontier is a mid-size holding company with local operations in 25 states. As an incumbent local exchange carrier (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. 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. Additionally, Frontier's affiliate, Electric Lightwave, Inc. (ELI), is a leading competitive local exchange carrier (CLEC) and enhanced service provider, with local operations concentrated in five northwestern states, and long distance operations throughout the country.

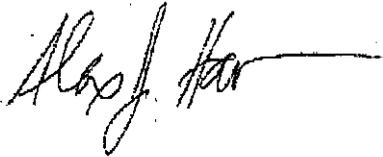
This somewhat unique mix of size, industry segment, geographic scope and business conditions, allows Frontier special insights into the major issues confronting the Commission and the industry in regard to intercarrier compensation and universal service. Frontier has participated in a number of industry group efforts exploring these issues, but ultimately has chosen to develop and submit its own proposal. This proposal is offered in order to highlight potential market-based solutions which have not been proposed or substantially developed thus far. Our objective was to create a balanced plan to address public policy and industry requirements in a forward-looking, economically rational and sustainable manner. Simple and

FCC Commissioners  
May 9, 2005  
Page 2 of 2

straightforward in concept, the plan is offered in good faith as an effort to contribute toward the creation of balanced viable solutions.

If you wish to discuss this proposal, please contact me at 203-614-5173 or Ken Mason at 585-777-5645.

Sincerely



Alex J. Harris  
Vice President-Regulatory

cc: Thomas Navin - Chief, Wireline Competition Bureau  
Michelle Carey - Office of Chairman Martin  
Lauren Belvin - Office of Commissioner Abernathy  
Jessica Rosenworcel - Office of Commissioner Copps  
Scott Bergmann - Office of Commissioner Adelstein

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

**PLAN SUMMARY**

**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 -- SUMMARY

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The UNIVERSAL TELECOMMUNICATIONS FREEDOM (UTF) plan is a comprehensive proposal for intercarrier compensation reform, universal service fund (USF) reform and regulatory relief.

### INTERCARRIER COMPENSATION REFORM

- o UTF will unify all forms of intercarrier connectivity and compensation – interstate access, intrastate access, reciprocal compensation, EAS settlements, ISP traffic arrangements, etc. – into a single default architecture and compensation structure.
- o UTF will replace several complex, multi-element minutes of use structures, bill & keep arrangements, etc., with a single, simple three element capacity-based system:
  - Ports: The basic interface on the actual network device to which traffic terminates. All service providers will charge uniform, nationwide cost-based monthly flat rates for ports based on the capacity of the interface: DS0 = \$18.75, DS1 = \$446, DS3 = \$12,477.
  - Transport: Fixed transport facilities. Transport will be wholly deregulated for all service providers, allowing complete geographic de-averaging and market pricing.
  - Transiting: Wholesale transport and termination for all traffic types – functionally identical to wholesale LD termination services of today. In most instances Transiting will be wholly deregulated; for markets where competitive provision of transiting is not available, an industry bidding process will establish minimum transiting requirements and obligations.
- o UTF only sets defaults – all service providers are free to negotiate alternatives.
- o The reduction in intercarrier revenues caused by conversion to UTF will be shifted to USF.

### INTERCARRIER REPLACEMENT & USF REFORM

- o Connection-Based Contribution Mechanism
  - UTF will extend the contribution base to all connections provided to premises of retail customers, including but not necessarily limited to: POTS, CMRS, DSL, Cable Modem, CATV, DBS, Private Line/Special Access.
  - Connections (but not services or applications provided over connections) will be assessed a flat monthly bandwidth-based (NOT revenue-based) surcharge.
- o USF Calculation & Distribution
  - The High Cost Loop fund will rebased to the frozen national average cost per loop of \$240.
  - In each study area, all existing service provider support programs (High Cost Loop, Local Switching, Long Term Support, Interstate Access Support, Interstate Common Line Support) will be merged into a single Residential Connection Support (RCS) fund.
  - The total RCS amount in each study area will be capped and disaggregated to the individual exchange areas, based on the relative costs of service within the study area.
  - RCS funding will be disbursed to service providers based on the number and bandwidth of *communications-capable connections* (i.e., connections which provide

## UNIVERSAL TELECOMMUNICATIONS FREEDOM (UTF) PLAN -- SUMMARY

unfettered, two-way, real-time access to the PSTN or the public Internet) each service provider delivers to residential customer premises.

- Residential POTS, CMRS, DSL and cable modem would qualify.
- Business connections, CATV connections and DBS connections would not qualify, nor would applications (VoIP, LD, etc.) delivered over any connection.

### o Non-Rural Inter-carrier Replacement Calculation & Distribution

- In non-rural study areas, each service provider which received inter-carrier compensation prior to conversion to UTF will be eligible to receive Inter-carrier Compensation Transitional Replacement (ICTR) funding based on its prior inter-carrier compensation revenues.
- ICTR will be paid at a declining rate for 5 years, at the end of which time such funding shall be wholly eliminated in non-rural areas for all service providers.
- Service providers shall have complete discretion to fully recover reductions in ICTR funding via increases in retail prices.

### o Rural Inter-carrier Replacement Calculation & Distribution

- In rural areas, long-term inter-carrier compensation replacement shall be provided via the Carrier of Last Resort Network Support (CoLR) fund.
- In each rural study area, CoLR funding will be calculated based on the total inter-carrier compensation reduction experienced by the ILEC.
- The total CoLR amount in each study area will be capped and disaggregated to the individual exchange areas, based on the relative costs of service within the study area.
- CoLR funding (like RCS funding) will be disbursed to service providers based on the number and bandwidth of *communications-capable connections* (i.e., connections which provide unfettered, two-way, real-time access to the PSTN or the public Internet) each service provider delivers to residential customer premises, except that CoLR funding within an exchange will only be disbursed to service providers which commit to and are capable of delivering a basic, residential voice service which:
  - is available on a stand-alone basis ubiquitously throughout an exchange area,
  - fully meets all backup/survivable power standards currently required of POTS,
  - provides complete 1+ toll/LD pre-subscription,
  - fully meets all public safety and consumer protection requirements,
  - is capable of placing or receiving calls from any PSTN telephone number, and
  - complies with maximum price, calling scope, service quality and availability requirements.

## REGULATORY RELIEF

Under UTF all telecom services will be deregulated except for minimum inter-carrier arrangements and the stand-alone basic residential voice service required for CoLR support. Those services will be price capped, but will not be subject to any other economic regulation.

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

**Frontier**

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Alex J. Harris  
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May 9, 2005

**UNIVERSAL TELECOMMUNICATIONS FREEDOM (UTF) PLAN**  
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**TABLE OF CONTENTS**

INTRODUCTION .....	1
INTERCARRIER COMPENSATION REFORM .....	4
RATIONALE.....	5
PRINCIPLES.....	6
ARCHITECTURE & COMPENSATION .....	8
Ports.....	7
Transport.....	9
Transfiting .....	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

May 9, 2005

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

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**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) industry<sup>1</sup>, 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 21<sup>st</sup> 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

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<sup>1</sup> Encompassing both ILECs and CLECs.

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

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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.<sup>2</sup>
- **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)

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<sup>2</sup> 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*

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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*

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**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.<sup>3</sup>

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,

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<sup>3</sup> 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*

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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.<sup>4</sup>
- When service provider A directly terminates traffic to the network of service provider B, or utilizes a local access number<sup>5</sup>, 950-XXXX<sup>6</sup>, 1+<sup>7</sup>, 10-1X-XXXX<sup>8</sup>, 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 variable<sup>9</sup>; (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

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

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

<sup>6</sup> The dialing arrangement currently utilized for Feature Group B access.

<sup>7</sup> The dialing arrangement currently utilized for Feature Group D access.

<sup>8</sup> The dialing arrangement currently utilized for Feature Group D access.

<sup>9</sup> 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*

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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 Inter-carrier 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*

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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.<sup>10</sup> 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:

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<sup>10</sup> 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*

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- 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.<sup>11</sup>
- 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.

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<sup>11</sup> 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.

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*An Integrated & Comprehensive Reform Proposal*

- o 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 allowance<sup>12</sup>:

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

- o 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 prices<sup>13</sup> 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.
- o 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.
- o 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.

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

<sup>13</sup> This would include the local PRI port rate, the PRI SLC rate as well as the federal PRI port rate.

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*An Integrated & Comprehensive Reform Proposal*

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- 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.<sup>14</sup>

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"<sup>15</sup>, "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 3<sup>rd</sup> party LEC or CMRS for either "common transport" or "tandem transiting", and the end office provider bills the 3<sup>rd</sup> 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.

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<sup>14</sup> 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.

<sup>15</sup> 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*

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- 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*

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- o 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.
- o 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*

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**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*

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- 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 programs<sup>16</sup> 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

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<sup>16</sup> 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.

<b>CONNECTION-BASED CONTRIBUTION MECHANISM</b>							
						Maximum Monthly Charge \$	2.99
						Kbps Factor	256
<b>Example 1</b>							
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	
<b>Totals</b>	<b>455,700,000</b>				<b>\$ 426,700,000</b>	<b>\$ 5,120,400,000</b>	
<b>Example 2</b>							
Connection Type	Quantity	Kbps Proxy	Factor Multiples	Monthly Charge	Monthly Collections	Annual Collections	
VGE Access Lines	160,000,000	64	1	\$ 0.83	\$ 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	\$ 255,348,000	\$ 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	
<b>Totals</b>	<b>455,700,000</b>				<b>\$ 583,743,000</b>	<b>\$ 7,004,916,000</b>	

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*

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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-capable<sup>17</sup> 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-rural<sup>18</sup> 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,

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<sup>17</sup> 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.

<sup>18</sup> 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*

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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/EAS<sup>19</sup> 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 reductions<sup>20</sup>

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

**RURAL INTERCARRIER REPLACEMENT CALCULATION & DISTRIBUTION**

1. In each rural<sup>21</sup> 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.

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<sup>19</sup> 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.

<sup>20</sup> 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.

<sup>21</sup> 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*

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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 ILEC<sup>22</sup> 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.

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<sup>22</sup> 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.

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*An Integrated & Comprehensive Reform Proposal*

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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*

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**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 21<sup>st</sup> 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.<sup>23</sup> 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 deregulation<sup>24</sup> 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.

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<sup>23</sup> 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.

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

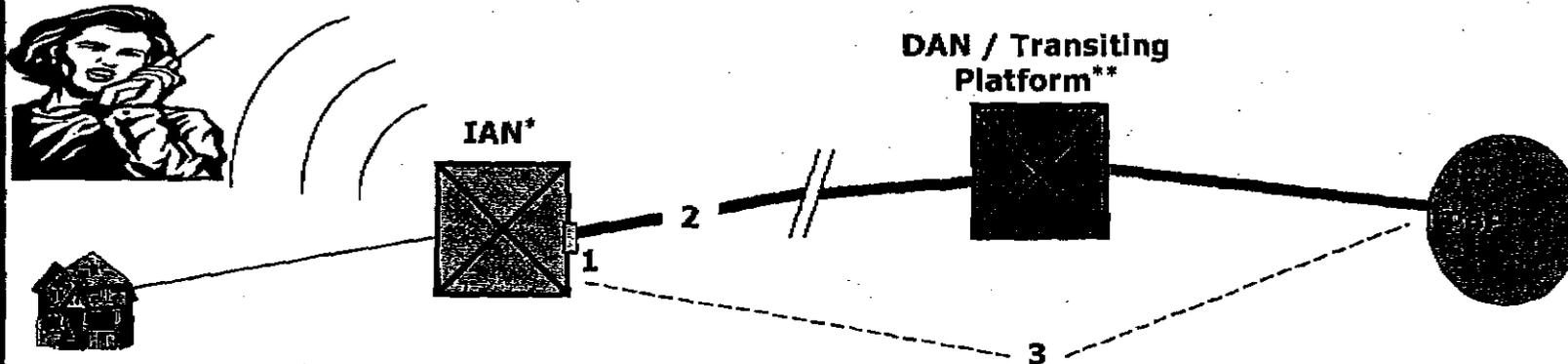
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FREEDOM (UTF) PLAN:***

***Basic Network Diagrams***

May 9, 2005

# UTF Plan: Transiting Arrangement

frontier  
A Charter Communications Company



## Elements Billed by IAN Provider to the Transiting Provider

- 1) **IAN Port:** Monthly flat rate per port. This is also the financial POI.
- 2) **Transport:** Transmission facilities (if any) provided by the IAN provider are market priced and billed to the purchaser of the Port.

## Elements Billed by Transiting Provider to the Retail Responsible Party

- 3) **Transiting Service:** Provided either on a wholly deregulated basis or pursuant to terms of a DAN provider's winning bid for the DAN concession in the geographic area.

\* **Intercarrier Access Node (IAN):** Examples include an ILEC or CLEC End Office/Host, a CMRS Mobile Telephone Switching Office, a VoIP Gateway, or equivalent.

\*\* **Default Aggregation Node (DAN):** A device providing transiting/tandeming functionality within a geographic area.

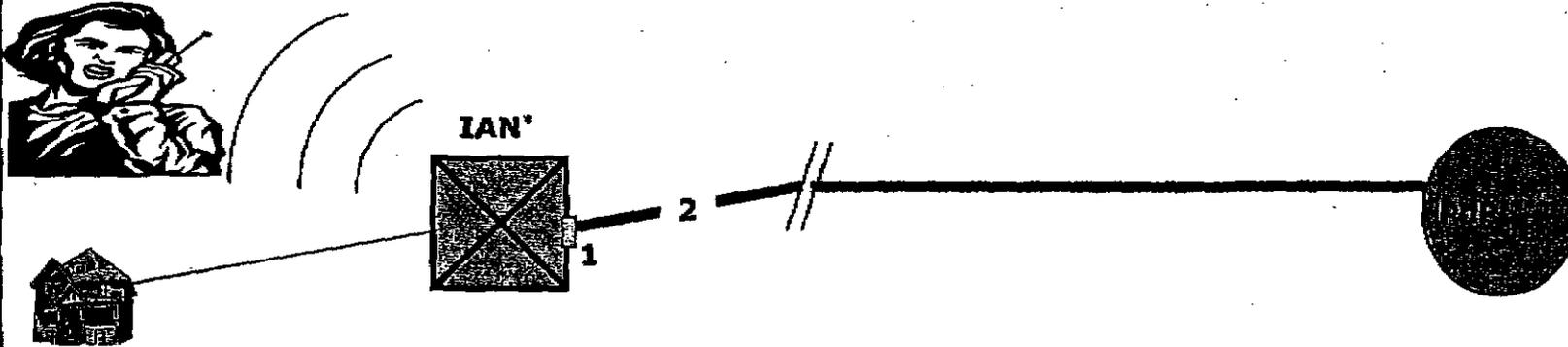
\*\*\* **Point of Presence (PoP):** The network location from which the service provider with retail responsibility for the traffic purchases aggregated transport and termination from the Transiting provider. This could be an ILEC, CLEC, CMRS, IXC or ESP/ISP terminating any combination of local/EAS, toll, LD, toll-free or enhanced services traffic to the IAN; or an IXC or ESP/ISP originating any combination of toll, LD or dial-up services traffic from the IAN.

May 9, 2005

1

# UTF Plan: Direct Arrangement

frontier  
A Citizens Communications Company



## Elements Billed by IAN Provider to the Retail Responsible Party

- 1) **IAN Port:** Monthly flat rate per port. This is also the financial POI.
- 2) **Transport:** Transmission facilities (if any) provided by the IAN provider are market priced and billed to the purchaser of the Port.

\* **Intercarrier Access Node (IAN):** Examples include an ILEC or CLEC End Office/Host, a CMRS Mobile Telephone Switching Office, a VoIP Gateway, or equivalent.

\*\* **Default Aggregation Node (DAN):** A device providing transiting/tandeming functionality within a geographic area.

\*\*\* **Point of Presence (PoP):** The network location from which the service provider with retail responsibility for the traffic arranges direct transport to an IAN port on the IAN provider's network. This could be an ILEC, CLEC, CMRS, IXC or ESP/ISP terminating any combination of local/EAS, toll, LD or enhanced services traffic to the IAN; or an IXC or ESP/ISP originating any combination of toll, LD or dial-up services traffic from the IAN.

May 9, 2005

2