BEFORE THE ARIZONA CORPORATION COMMISSION

RECEIVED

COMMISSIONERS
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IN THE MATTER OF THE REVIEW AND POSSIBLE REVISION OF ARIZONA UNIVERSAL SERVICE FUND RULES, ARTICLE 12 OF THE ARIZONA ADMINISTRATIVE CODE.

IN THE MATTER OF THE INVESTIGATION OF THE COST OF TELECOMMUNICATIONS ACCESS

Docket No. RT-00000H-97-0137

NOTICE OF FILING

Docket No. T-00000D-00-0672


RESPECTFULLY SUBMITTED this 14th day of February 2011.

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

In the Matter of

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

NOTICE OF PROPOSED RULEMAKING AND FURTHER NOTICE OF PROPOSED RULEMAKING

Adopted: February 8, 2011
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Comment Date on Section XV: [30 days after date of publication in the Federal Register]
Reply Comment Date on Section XV: [45 days after date of publication in the Federal Register]
Comment Date on the Remaining Sections: [45 days after date of publication in the Federal Register]
Comment Date of State Members of the Federal-State Joint Board on Universal Service: [59 days after date of publication in the Federal Register]
Reply Comment Date on Remaining Sections: [80 days after date of publication in the Federal Register]

By the Commission: Chairman Genachowski and Commissioners Copps, McDowell, Clyburn and Baker issuing separate statements.

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I. INTRODUCTION

1. Bringing robust, affordable broadband to all Americans is the great infrastructure challenge of our time. The private sector is taking the lead in meeting this challenge, but in areas of the country where it is not economically viable to deploy and/or operate broadband networks, including many rural areas, public support is needed to spur private investment. Today, as the National Broadband Plan recommends, we propose to fundamentally modernize the Commission’s Universal Service Fund (USF or Fund) and intercarrier compensation (ICC) system. We propose to do so by eliminating waste and inefficiency and reorienting USF and ICC to meet the nation’s broadband availability challenge, transforming a 20th century program into an integrated program tailored for 21st century needs and opportunities.

2. The principle that all Americans should have access to communications services, a concept referred to as universal service, has been at the core of the Commission’s mandate since its founding. Congress created this Commission in 1934 for the purpose of making “available . . . to all the people of the United States . . . a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges.” In the decades since, federal and state policymakers developed a complex system of public-private partnerships that supports deployment and adoption of telephone service in costly-to-serve areas. A combination of payments from long distance to local phone companies (ICC) and explicit support from USF has helped local phone

\(^1\) 47 U.S.C. § 151.
companies serve nearly all Americans. But networks that provide only voice service are no longer adequate for the country’s communication needs.

3. Ubiquitous broadband infrastructure has become crucial to our nation’s economic development and civic life. Businesses need broadband to start and grow; adults need broadband to find jobs; children need broadband to learn. Broadband enables people with disabilities to participate more fully in society and provides opportunity to Americans of all income levels. Broadband also helps lower the costs and improve the quality of health care. As important as these benefits are in America’s cities—where more than two-thirds of residents have come to rely on broadband—the distance-conquering benefits of broadband can be even more important in America’s more remote small towns, rural and insular areas, and Tribal lands. Furthermore, the benefits of broadband grow when all areas of the country are connected. More users online means more information flowing, larger markets for goods and services, and more rapid innovation. Congress recognized as much in 1996 when it directed the Commission to examine regularly whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely manner, and more recently in February 2009 when it tasked the Commission with developing a National Broadband Plan “to ensure that all people of the United States have access to broadband capability,” and a “strategy for achieving affordability of such service and maximum utilization of broadband infrastructure.”

4. In the 21st century, Americans will use fixed and mobile networks to experience the benefits of broadband. Businesses, anchor institutions, and individuals rely on the high-speed capabilities of fixed broadband networks for services such as high-definition remote medical consultations, “telepresence” videoconferencing, and video-based distance learning. Meanwhile, as desktop PCs give way to laptops, netbooks, smart phones, and tablets, more people are taking their broadband devices on the road and using mobile broadband connectivity in their jobs, education, and health care. The benefits of mobility may be particularly important to rural consumers and schoolchildren who typically travel farther distances to reach work and school, and are vital for public safety: Approximately half of all 911 calls today are made from mobile phones. At the same time, fixed networks remain essential for mobile services, which typically depend on fixed backhaul to connect cell towers and enable mobile communications to other networks.

5. Today, while most Americans have access to broadband, as many as 24 million Americans—one in thirteen of us—live in areas where there is no access to any broadband network, fixed (e.g., DSL or cable Internet service) or mobile. The unserved include the family in Alachua County,

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4 Throughout this document, except in reference to the current interim cap on high-cost support for competitive ETCs, “Tribal lands” include any federally recognized Indian tribe’s reservation, pueblo or colony, including former reservations in Oklahoma, Alaska Native regions established pursuant to the Alaska Native Claims Settlements Act (85 Stat. 688), and Indian Allotments, see 47 C.F.R. § 54.400(e), as well as Hawaiian Home Lands—areas held in trust for native Hawaiians by the state of Hawaii, pursuant to the Hawaiian Homes Commission Act, 1920, Act July 9, 1921, 42 Stat. 108, et seq., as amended.


7 National Broadband Plan at 20.

8 Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the (continued....)
Florida whose daughter routinely drives to a vacant public library parking lot at night to use the WiFi connection to download her high school homework, because her family cannot get broadband at home. They include the family in Montgomery County, Ohio who is frustrated that they cannot get broadband from their local telephone company, even though broadband is available two miles away in the town of Brookville. They include the Native Alaskan community of Kotzebue, which cannot retain teachers due to the lack of basic amenities including Internet connectivity. There are unserved areas in every state of the nation and its territories, and in many of these areas there is little reason to believe that Congress’s desire “to ensure that all people of the United States have access to broadband capability” will be met any time soon if current policies are not reformed.

6. Our USF and ICC programs currently are directed at telephone service, not broadband. The component of the Fund that supports telecommunications service in high-cost areas has grown from $2.6 billion in 2001 to $4.3 billion in 2010, but it still primarily supports voice, including, in some instances, broadband-capable infrastructure that delivers voice. While the Fund’s support has enabled some rural telephone companies to deploy broadband-capable lines, many rural areas receive insufficient support for broadband, creating a “rural-rural divide.” The ICC regime, too, was designed for a world of voice minutes and separate long-distance and local telephone companies. It has had the effect of rewarding carriers for maintaining outdated infrastructure rather than migrating to Internet protocol (IP)-based networks. Thus, current rules actually disincentivize something necessary for our global competitiveness: the transition from analog circuit-switched networks to IP networks.

7. In addition, fundamental inefficiencies riddle both USF and ICC. In many areas of the country, USF provides more support than necessary to achieve our goals, subsidizes a competitor to a voice and broadband provider that is offering service without government assistance, or supports several voice networks in a single area. Similarly inefficient ICC rules create incentives for wasteful arbitrage. In particular, because rates that local carriers receive to deliver a call vary widely depending on where the call originated and the classification and type of service providers involved, the carriers paying such charges may mask the origination of voice traffic to reduce or avoid payments, creating “phantom traffic.” In addition, regulations allowing some carriers to assess above-cost rates for delivering traffic to their subscribers create incentives for local carriers to artificially inflate their traffic volumes, thereby increasing the payments they receive, a practice referred to as “access stimulation” or “traffic pumping.” Practices like these and the disputes surrounding their cost hundreds of millions of dollars annually that could be used for investment and more productive endeavors—costs that are ultimately borne by consumers.

8. We face these problems because our universal service rules and our ICC system, designed for 20th century networks and market dynamics, have not been comprehensively reassessed in more than a decade, even though the communications landscape has changed dramatically. Mobile services are vastly more prominent than even a few years ago—more than 27 percent of adults live in households with only wireless phones. Broadband Internet access revenues have grown from $13.1 billion in 2001 to $4.3 billion in 2010, but it still primarily supports voice, including, in some instances, broadband-capable infrastructure that delivers voice. While the Fund’s support has enabled some rural telephone companies to deploy broadband-capable lines, many rural areas receive insufficient support for broadband, creating a “rural-rural divide.” The ICC regime, too, was designed for a world of voice minutes and separate long-distance and local telephone companies. It has had the effect of rewarding carriers for maintaining outdated infrastructure rather than migrating to Internet protocol (IP)-based networks. Thus, current rules actually disincentivize something necessary for our global competitiveness: the transition from analog circuit-switched networks to IP networks.


billion in 2003 to $36.7 billion in 2009, while traditional wireline telephone (switched access) minutes plummeted from 567 billion in 2000 to 316 billion in 2008.\textsuperscript{11} From 2008 to 2009, interconnected Voice over Internet Protocol (VoIP) subscriptions increased by 22 percent, while switched access lines decreased by 10 percent.\textsuperscript{12} Incumbent telephone companies that operate in rural areas increasingly face competition from other providers, including cable and wireless companies in portions of their service area, but remain the carrier of last resort (COLR) outside of towns, where there are typically too few customers to support a sustainable business.\textsuperscript{13}

9. As Representative Lee Terry and Rick Boucher, former Chairman of the House Subcommittee on Communications, Technology and the Internet, said last year, “the Universal Service Fund is broken.”\textsuperscript{14} And because of the interrelationship between USF and ICC, and the importance of both to the nation’s broadband goals, reform of the two programs must be tackled together. As the Commission said in its Joint Statement on Broadband, released when the National Broadband Plan was delivered to Congress last March, “[USF] and [ICC] should be comprehensively reformed to increase accountability and efficiency, encourage targeted investment in broadband infrastructure, and emphasize the importance of broadband to the future of these programs.”\textsuperscript{15}

10. Consistent with the Joint Statement and the Broadband Plan, the Commission plans to be guided by the following four principles, rooted in section 254, as we proceed with USF and ICC reform:

- **Modernize USF and ICC for Broadband.** Modernize and refocus USF and ICC to make affordable broadband available to all Americans and accelerate the transition from circuit-switched to IP networks, with voice ultimately one of many applications running over fixed and mobile broadband networks. Unserved communities across the nation cannot continue to be left behind.

- **Fiscal Responsibility.** Control the size of USF as it transitions to support broadband, including by reducing waste and inefficiency. We recognize that American consumers and businesses ultimately pay for USF, and that this contribution burden may undermine the benefits of the program by discouraging adoption.

- **Accountability.** Require accountability from companies receiving support, to ensure that public investments are used wisely to deliver intended results. Government must also be accountable for the administration of USF, including through clear goals and performance metrics for the program.


\textsuperscript{13} National Telecommunications Cooperative Association, *NTCA 2010 Broadband/Internet Availability Survey Report*, at 3, 8 (Jan. 2011) (“Ninety-eight percent of survey respondents indicated that they face competition in the provision of advanced services from at least one other service provider [such as cable companies and wireless Internet service providers] in some portion of their service area,” but forty-four percent of those respondents indicate that “competitors were serving only the cities and towns in their service areas.”).


Market-Driven Policies. Transition to market-driven and incentive-based policies that encourage technologies and services that maximize the value of scarce program resources and the benefits to all consumers.\textsuperscript{16}

11. We seek comment on these principles for reform. Section 254 of the Act lays out principles for Commission policies to preserve and advance universal service.\textsuperscript{17} Section 254(c)(1) defines universal service as evolving; thus, we are seeking to modernize it.\textsuperscript{18} Section 254(b)(5) requires that support be “sufficient, predictable and sufficient,” which courts have interpreted as requiring support that is sufficient but not excessive, consistent with our commitment to fiscal responsibility and market-driven, incentive-based policies.\textsuperscript{19} Finally, accountability is essential to ensure that our programs are in fact preserving and advancing universal service by providing the “[a]ccess to advanced telecommunications and information services . . . in all regions of the Nation” that Congress envisioned in section 254(b)(2).\textsuperscript{20}

12. As we proceed with USF and ICC reform, we intend to avoid sudden changes or “flash cuts” in our policies, acknowledging the benefits of measured transitions that enable stakeholders to adapt to changing circumstances and minimize disruption. We note that if additional funding were available for USF and ICC reform, it could accelerate and ease the necessary transitions.

13. We recognize that USF and ICC are both hybrid state-federal systems, and that reform will work best with the Commission and state regulators cooperating to achieve shared goals. We also acknowledge that crucial work has already been done to advance broadband deployment in hard-to-serve areas—including by the National Telecommunications and Information Administration (NTIA) and the Rural Utilities Service (RUS) through American Recovery and Reinvestment Act grants and loans as well as ongoing RUS programs, and by states through their own efforts to extend broadband. We seek to incorporate the lessons learned from those programs. We seek input from our federal and state partners and Tribal governments on how best to coordinate efforts to ensure that all Americans have access to modern communications networks so that we can continue to work together to build on the past success of universal service.

II. EXECUTIVE SUMMARY

14. This section summarizes our proposed framework for reform. Our proposals are designed to achieve the four core principles above—modernizing and refocusing USF and ICC to ensure all Americans have access to robust, affordable broadband and to accelerate the transition to IP networks; fiscal responsibility; accountability; and use of market-driven and incentive-based policies—and we seek to ensure that the future of USF and ICC are consistent with those principles. We recognize, however, that there are a number of potential paths to that future state. We also recognize the difficulty of precisely forecasting the consequences of changes to a system as complex and interdependent as USF and ICC, as well as the benefits of piloting innovative policies—such as competitive bidding to support build out and ongoing operation of fixed and mobile broadband networks—before broader implementation. We therefore propose several specific, near-term steps that will accelerate broadband investment in unserved areas and set USF and ICC on a path that is consistent with the principles we have proposed; we then describe alternatives for completing the reform process over the longer term. We intend to monitor the progress of the near-term reforms and adjust course as necessary as we complete the reform process from among the longer-term options.

\textsuperscript{16} We recognize that in some geographic areas there may be no private sector business case for offering voice and broadband services. This is not in tension with our commitment to use market-driven regulation.

\textsuperscript{17} 47 U.S.C. § 254.

\textsuperscript{18} 47 U.S.C. § 254(c)(1).

\textsuperscript{19} 47 U.S.C. § 254(b)(5). \textit{See infra para. 412.}

\textsuperscript{20} 47 U.S.C. § 254(b)(2).
15. We believe the USF and ICC regimes will benefit from simplification and unification: The Connect America Fund (CAF) we propose to create would ultimately replace all other explicit support provided by the current high-cost fund as well as implicit subsidies from the ICC system. To be clear, we are not proposing to eliminate universal service support for communications services in high-cost areas of the country; rather, we are proposing to improve the efficiency and effectiveness of that support.

16. Our reforms must balance a number of other important and possibly competing priorities. These priorities include advancing broadband service to all Americans; sustaining high-quality, reliable voice service for all Americans; sustaining and expanding mobile voice and mobile broadband coverage throughout the country; increasing adoption of advanced communications services; and minimizing the burden on consumers and businesses, who pay for universal service. We seek comment on the relative importance of these objectives and look forward to developing a full record on the appropriate balance among them.

17. Reform will require all major stakeholders in the USF and ICC system to grapple with the practical consequences of change. We do not propose any “flash cuts,” but rather suggest transitions and glide paths that we believe will facilitate adaptation to reforms. Change to USF and ICC policies need not and should not be sudden or overly disruptive, but change must begin so that our country can reach its broadband goals in an efficient and accountable way.

A. Universal Service Fund

18. Building on the recommendations of the National Broadband Plan and the record from the USF Reform NOI/NPRM, we propose to transform the existing high-cost program—the component of USF directed toward high-cost, rural, and insular areas (which we often refer to as “USF” in this document)—into a new, more efficient, broadband-focused Connect America Fund. As shown in Figure 1 below, we propose to undertake this comprehensive reform in two stages: a set of immediate reforms including, among other near-term goals, the establishment of the CAF, followed by the final selection of the long-term CAF funding mechanism, based on monitoring and evaluation of experiences with the near-term reforms.

1. Immediate Reforms

19. In October 2010, we issued the Mobility Fund NPRM, which proposed a Mobility Fund intended to spur build out of advanced mobile wireless networks in areas not served by current-generation mobile networks. We now continue our reform efforts in this proceeding by proposing steps to spur broadband build out, whether fixed or mobile, in unserved areas, which exist in every state as well as the territories. We propose to do this by transitioning funds from less efficient uses to more efficient uses, include through the creation of the CAF. We also seek comment on other measures to reduce inefficiencies, extend broadband, and increase the accountability of companies receiving support.

20. In 2010, the high-cost fund disbursed $4.3 billion through five separate mechanisms designed to support different kinds of costs and different types of carriers, as shown in Figure 2, below:
Federal Communications Commission

Existing High-Cost Fund (2010 Actual)  
($ amounts in millions)

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<tr>
<th>WHO receives</th>
<th>High-Cost Model Support</th>
<th>Interstate Access Support (capped)</th>
<th>High-Cost Loop Support (capped)</th>
<th>Local Switching Support</th>
<th>Interstate Common Line Support</th>
<th>Total</th>
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<td>Incumbent</td>
<td>$310</td>
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<td>$1,379</td>
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Source: USAC actual disbursements January – December 2010. Amounts shown reflect disbursements made on an accrual basis for all study areas for which USAC had line count information as of November 2011. Disbursements may include true-ups for earlier years, and disbursements for calendar year 2010 are subject to additional true-ups during future periods.

Note: Competitive ETC support is capped at approximately $1.366 billion per year.22

Figure 2

21. In this proceeding, we propose the following reforms to be implemented beginning in 2012:

- Three components of the high-cost program primarily support smaller carriers regulated under “rate-of-return” rules:23 high-cost loop support (HCLS), which provided $1 billion for incumbents

22 See Letter from Sharon Gillett, Chief, Wireline Competition Bureau, to Karen Majcher, USAC, WC Docket No. 05-337, DA 11-243 (dated Feb. 8, 2011) (Interim Cap Adjustment Letter). These estimates include amounts disbursed to Sprint and Verizon Wireless, which agreed in 2008 to phase out their competitive ETC support over five years as a condition of the approval of certain transactions. Last year, the Commission provided instructions for implementing the commitments of both Verizon Wireless and Sprint to surrender their high-cost universal service support, resulting in recapture of amounts previously disbursed in 2009. See High-Cost Universal Service Support, Federal-State Joint Board on Universal Service, Request for Review of Decision of Universal Service Administrator by Carr Wireless Communications, LLC, WC Docket No. 05-337, CC Docket No. 96-45, Order and Notice of Proposed Rulemaking, 25 FCC Rcd 12854 (2010) (Carr Wireless Order). Net of the support provided to Sprint and Verizon, the amount of competitive ETC support shown in the table would have been $921 million.

23 Rate-of-return regulation is a form of rate regulation in which a carrier's rates are set at levels to give the carrier an opportunity to recover its operating costs plus an authorized rate of return on the regulated rate base (plant in service minus accumulated depreciation).
in 2010; local switching support (LSS), which provided $276 million for incumbents in 2010; and interstate common line support (ICLS), which provided $1.1 billion for incumbents in 2010.24 As currently structured, these funding mechanisms provide poor incentives for rate-of-return carriers to operate and invest efficiently. While individual carriers may act in the best interests of their own customers and communities, excessive spending by any one community limits opportunities for consumers in other communities and may not be in the best interests of the nation as a whole. HCLS, for example, creates incentives for companies to outspend their peers in order to receive more funding under the current capped formula. For all three programs, there are few, if any, benchmarks for determining whether network investment is justified or appropriate, allowing a company to spend millions of dollars to build a state-of-the-art network that may serve only a few customers. LSS was originally created to help small telephone companies that lack economies of scale to afford large switches, but since then the industry has moved to software-based routers and switches which can be more easily scaled to a company's size and even shared among companies. LSS now provides perverse incentives for companies not to realize efficiencies by combining service areas. We seek comment on a suite of reforms to these components, which will increase accountability and start rate-of-return carriers on the path towards market-driven, incentive-based regulation. Specifically, we seek comment on:

- Reducing the reimbursement rates for the current high-cost loop program, in order to distribute funding—which has been capped since the 1990s—in a more equitable manner among rural carriers. Today, high-cost loop support largely goes to companies that have accelerated network upgrades throughout their territory, leaving nothing available for other smaller companies that choose to upgrade their networks more incrementally.

- Phasing out Local Switching Support or, alternatively, combining LSS and HCLS into a single, more efficient mechanism to support network costs. Larger holding companies are able to exploit the current LSS rules to gain additional support for switching costs, increasing the burden on American consumers who support the Fund.

- Setting reasonable guidelines for reimbursements for capital and operating expenses based on benchmarks developed from investments made by comparable companies. Today, there are few controls on such reimbursements, leaving companies with broad discretion to control how much public money they get and how they use it.

- Limiting the total support per line any one carrier in the continental United States can receive, absent exceptional circumstances. While we recognize that USF provides support to the hardest-to-serve areas, which may be very costly to serve, it is not clear that all of the amounts provided today are necessary to provide reliable service. We propose a process in which companies operating in the continental United States receiving in excess of $250 per month per line would have to justify higher amounts of support.

- Streamlining the study area waiver process to eliminate barriers to consolidation and rationalization of service territories.

- Modifying rules that limit support when acquiring lines from another provider in situations where the acquired lines are substantially unserved by broadband (the “parent trap rule”), in order to provide greater incentives to upgrade those facilities.

We propose to phase out Interstate Access Support (IAS) over a period of a few years. In 2010, IAS totaled $545 million. Originally created in 2000 as an interim part of a five-year transitional reform plan, IAS has long outlived its intended lifespan. The comments received in response to the USF Reform NOI/NPRM suggest that this fund is not critical to ensuring rural voice service,

24 Some of the larger, price cap carriers, however, do receive some HCLS, LSS, and ICLS. For instance, mid-size companies that recently converted from rate-of-return to price cap regulation receive ICLS that is frozen on a per-line basis.
and we believe the funds could be more productively used to support the deployment of broadband to unserved areas.

- In addition, we propose to eliminate the “identical support” rule and to rationalize funding for competitive Eligible Telecommunications Carriers (ETCs) over a several-year period. In 2010, non-IAS competitive ETC funding totaled $1.1 billion. Under the Commission’s identical support rule, competitive ETCs (mostly wireless carriers) receive this support, subject to an interim cap, regardless of actual costs or needs, as a per-line, dollar-for-dollar match with the incumbent wireline carrier support per line in the same area. As a result, the funding is poorly targeted—in some areas, as many as four or more providers are receiving redundant ETC funding, while other areas lack even a single provider of broadband or mobile voice. Two of the largest ETCs have voluntarily agreed to relinquish their ETC support in the context of transactions, and the USF Reform NOI/NPRM record supports the conclusion that current levels of competitive ETC support are unnecessary to ensure fixed or mobile voice service in many areas of the country that receive support today.

At the same time, we recognize the importance of mobile voice and mobile broadband coverage in all areas of the country and seek comment on how to balance the desire for universal mobile coverage with other USF priorities. Our proposal in the Mobility Fund proceeding was intended to provide a one-time infusion to expand mobile coverage. We seek comment here on how best to factor the need for mobility into the reforms proposed in this proceeding to achieve our universal service objectives.

22. Taken together, the proposed changes to the high-cost program will enable significant funds to be used to support fixed and mobile broadband, as discussed below, and potentially a recovery mechanism associated with ICC reform, where necessary, as summarized below.

23. We seek comment on the appropriate size of these programs. We propose that, together with remaining high-cost support, total disbursements remain no greater than the high-cost program would be under current rules. We seek comment, however, on whether total disbursements should be lower in the future to minimize the burden on consumers. In light of the high costs that would be required to ensure ubiquitous mobile coverage and very-high-speed broadband for every American and the length of the transition to the proposed Connect America Fund, we also seek comment on whether additional investments in universal service may be needed to accelerate network deployment.

24. To spur immediate new broadband investment through the CAF, we propose to conduct a competitive bidding process (also known as a reverse auction or a procurement auction) in which providers seeking a one-time infusion of support to build out and operate broadband networks in unserved areas across the country compete against one another by bidding for the lowest amount of support they would require to provide service to unserved housing units. Specifically, using the forthcoming National Broadband Map to identify areas that currently lack broadband, we propose to award a significant amount of funding, such as $500 million to more than $1 billion, through a technology-neutral reverse auction in 2012, with additional auctions potentially to follow. Recipients—which could be either fixed (wireline or wireless) or mobile wireless providers—will be subject to enforceable requirements to deploy broadband to the unserved areas (defined as census blocks or aggregations of census blocks) identified in their bid within a specified time period, such as three years, and provide service for a defined period of years after deployment is complete. They will be permitted to subcontract with other providers, including satellite broadband providers, to fulfill their service obligations in particularly difficult to reach portions of their proposed service areas. We seek comment on whether the broadband service obligation should be defined as a minimum of 4 megabits per second (Mbps) downstream and 1 Mbps upstream, or whether we should use other metrics.

25. If the auction winner is not the existing incumbent recipient of USF in the area during this interim transition period, that incumbent carrier of last resort would continue to receive its existing support, subject to the other reforms proposed in this Notice. If the auction winner is the existing provider, the new funding would supplement its existing support, subject to the other reforms proposed in this Notice. This use of a market-driven process to award support will spur high-impact broadband deployment and give the Commission and the private sector experience with a mechanism for providing consumers access to high-quality network infrastructure in an efficient manner.

26. To further promote deployment of broadband, we also seek comment on what broadband service obligations, based on section 254 of the Act, should apply to recipients of CAF support under the competitive bidding process described above, as well as whether any such obligations should apply to recipients of the reformed high-cost fund. We seek comment on how to ensure that service in rural areas is available at rates that are reasonably comparable to rates in urban areas. In addition, we propose to clarify that voice service can be provided by any technology, including VoIP, so that USF can be used directly to support modern IP-based networks.

27. Finally, we propose a variety of measures to increase accountability and better track performance of the Fund as a whole. Specifically:

- We propose to adopt performance goals and measures for the Fund as a tool to monitor how it is advancing the statutory goals set forth in section 254.
- We propose to adjust reporting requirements for Fund recipients, including requiring submission of certain financial information regarding operations, to enable the Commission to ensure that funds are being used efficiently and effectively. We seek comment on obtaining pricing data to ensure that services in rural areas are available at rates that are affordable and reasonably comparable to urban areas.
- We propose to revise our certification and audit processes to reflect updated public interest obligations for all Fund recipients, such as the requirement to deploy broadband networks.

28. In addition to substantially increasing Americans’ access to broadband and eliminating wasteful or inefficient spending, our proposed reforms will move USF and the companies that rely on it along the road to the future state of reform. They will also provide the Commission and industry valuable experience with market-based mechanisms for allocating support, while improving the Commission’s data on the functioning of USF. Finally, these reforms will introduce elements of incentive-based regulation to rate-of-return carriers.

29. To reduce uncertainty and help companies reliant on USF and ICC plan and invest for the future, we also propose several options for long-term CAF funding mechanisms, as described below. We seek comment on these options and may select the path for long-term reform at the same time we adopt the immediate reforms just described. But we propose to monitor the outcomes that result from these immediate reforms on an ongoing basis and evaluate them comprehensively beginning no later than three years after adoption of an order implementing initial reforms, to determine what course corrections may be needed at that time along the path to long-term reform.

2. Long-Term Vision

30. In the second stage of our comprehensive universal service reform, we propose to transition all remaining high-cost programs to the CAF. The CAF would provide ongoing support to maintain and advance broadband across the country in areas that are uneconomic to serve absent such support, with voice service ultimately provided as an application over broadband networks.

31. We seek comment on longer-term options for providing sufficient, but not excessive support for service to be provided in rural areas at rates that are affordable and reasonably comparable to rates in urban areas. Under one option, the Commission would award all ongoing support through a competitive, technology-neutral bidding mechanism (including using technology-neutral geographic areas). Under a second option, in each part of the country requiring ongoing universal service support,
the Commission would offer the current voice carrier of last resort (likely an incumbent telephone
c company) a right of first refusal to serve the area as the broadband provider of last resort for an ongoing
amount of annual support based on a cost model. If the provider refuses this offer, the Commission
would hold a competitive, technology-neutral process to select a provider to serve the area and take on all
service obligations, a process in which the current voice carrier of last resort could participate. Under
either approach, we propose that all ongoing support for carriers operating in high-cost areas would come
from the CAF. This funding would replace all other explicit support as well as all implicit subsidies from
ICC, as described in the next section.

32. In the alternative, we seek comment on limiting right-of-first refusal or auction-based
support to a subset of geographic areas, such as those served by price cap companies, while continuing to
provide ongoing support based on reasonable actual investment to smaller, rate-of-return companies.
Should we take this approach to the CAF, we seek comment on possible changes to the current rate-of-
return system beyond those discussed in the previous section, including capping and shifting interstate
common line support to an incentive regulation framework that would establish support amounts
periodically (such as every five years) to generate an appropriate forward-looking return for an efficient
carrier for the investments at issue, implementing a more rigorous process to examine whether investment
is used and useful, and re-examining the current 11.25 percent interstate rate of return.

33. Building on the interim reforms laid out in the previous section, we believe each of these
proposals for long-term reform provides a possible path to complete the transformation of the existing
high-cost fund into an accountable, fiscally responsible, market-driven and incentive-based system
focused on the nation’s broadband challenge.

B. Intercarrier Compensation

34. We propose to take action in the near term to reduce inefficiency and waste in the
intercarrier compensation system while providing a framework for long-term reform. This long-term
reform would gradually phase out the current per-minute ICC system and implement a recovery
mechanism (based on costs and/or revenues), which could enable some carriers to receive additional
explicit support from the CAF. Figure 3 below illustrates the proposed transition.
In the near term, we propose several reforms to reduce wasteful arbitrage and increase certainty in ICC payments during the transition away from the per-minute system. The record indicates that arbitrage schemes cost hundreds of millions of dollars each year and that regulatory uncertainty about whether or what ICC payments are required for VoIP traffic is hindering investment in IP-based products and services.

We propose to amend our interstate access rules to address access stimulation—arrangements in which carriers, often competitive carriers, profit from revenue-sharing agreements by operating in an area where the incumbent carrier has a relatively high per-minute interstate access rate. Under our existing rules, the competitive carrier benchmarks its rate to that of the incumbent rural carrier, but the revenue-sharing arrangement results in a volume of traffic that is more consistent with a larger carrier. A competitive carrier could, for example, generate millions of dollars in revenues each month from other carriers simply by entering into a revenue sharing arrangement with a company that operates a chat line. A rate-of-return carrier can likewise use our rules to take advantage of revenue sharing by setting a rate based, for example, on historical demand and then entering into an arrangement that inflates demand without adjusting its tariff to reflect a rate appropriate for such demand. We propose that carriers that have entered a revenue-sharing arrangement be required to refile their interstate switched access tariffs to reflect a low rate consistent with their volume of traffic. For rate-of-return incumbent local exchange carriers (LECs), the rate would be adjusted to account for new demand. For competitive carriers, that rate would be benchmarked to that of a large incumbent local exchange carrier (LEC) in the

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26 Today, there are three major forms of intercarrier compensation: interstate access charges, intrastate access charges, and reciprocal compensation. Access charges apply to long distance calls. The Commission regulates rates for interstate calls and states regulate rates for intrastate calls. Reciprocal compensation today primarily governs “local” calls, and rates are either negotiated by carriers or set by states using the Commission’s pricing methodology. Intrastate access rates are generally higher than interstate rates, and both are generally higher than reciprocal compensation rates, although large variations exist within each category.
state, rather than to that of the local rate-of-return carrier. We also seek comment on alternative approaches.

37. We propose to amend our call signaling rules to address “phantom traffic” by ensuring that calls received by the terminating provider include sufficient signaling information for that provider to identify and bill the appropriate provider. Phantom traffic today causes carriers to devote substantial resources to resolving billing disputes that could be used to invest or innovate. One provider, for example, estimates that 5-8 percent of all traffic terminating on its network is “phantom” or disguised traffic. Rules requiring the inclusion of appropriate signaling information would apply to all voice traffic, including interconnected VoIP, but the rules would be flexible enough to adapt to a variety of technical standards and accommodate their evolution. We also make clear that applying the signaling rules to interconnected VoIP does not prejudge the determination of any intercarrier payment obligation for interconnected VoIP calls.

38. We propose to determine the obligations for interconnected VoIP traffic under the ICC framework, and we seek comment on the appropriate intercarrier compensation regime. We seek comment on payment obligations for VoIP ranging from adopting a bill-and-keep methodology for VoIP, to applying a VoIP-specific ICC rate, to requiring VoIP calls to pay all existing ICC charges. We also seek comment on the implications for existing commercial arrangements that may address compensation for VoIP traffic.

39. By reducing inefficient use of resources and expenditures on disputes and litigation, we believe these proposals will allow companies to begin directing increased capital resources toward investment and innovation that ultimately benefits consumers.

2. Comprehensive Reform

40. At the same time, we propose to adopt a sustainable long-term framework to gradually reduce all per-minute charges. Per-minute charges are inconsistent with peering and transport arrangements for IP networks, where traffic is not measured in minutes. The record suggests that the current ICC system is impeding the transition to all-IP networks and distorting carriers’ incentives to invest in new, efficient IP equipment. Moreover, although the short-term measures we propose will address the most common forms of arbitrage today, wasteful attempts to game the system will likely persist as long as ICC rates remain disparate and well above carriers’ incremental costs of terminating a call.

41. Because the ICC system has not been reformed to reflect fundamental shifts in technology and competition in the last two decades, the current system results in considerable instability for carriers as revenues are declining at often unpredictable rates. Declining minutes for incumbent carriers have led to a concurrent decline in revenues, particularly for price cap carriers. By providing a more certain glide path for the transition to an all-IP future, intercarrier compensation reform will bring much needed predictability to the industry and investors, which will ultimately benefit consumers.

42. We seek comment on several aspects of our proposed reduction of ICC rates. In particular:

- **Federal/State Role:** We seek comment on two possible overall approaches for working with states to reform intercarrier compensation. The first approach relies on the Commission and states to act within their existing roles in regulating intercarrier compensation, such that states would remain responsible for reforming intrastate access charges. Under a possible variation, states would remain responsible for reforming wireline intrastate charges, but we also seek comment on whether we should set a glide path to reform wireless termination charges, possibly including intrastate access charges paid by or to wireless providers. The second approach relies on the Commission using the tools provided by sections 251 and 252 in the 1996 Act to unify all intercarrier rates, including those for intrastate calls, under the reciprocal compensation framework. Under this framework, the Commission would establish a methodology, which states would then work with the Commission to implement.
• **Sequencing:** We seek comment on the sequencing of ICC rate reductions and how the sequencing options relate to the roles of the states and the Commission. Interstate and intrastate access charges could change concurrently, particularly if the Commission and the states each act within their existing roles; alternatively, reforms could proceed sequentially, for example beginning with reductions in intrastate access charges to interstate levels, followed by a reduction of all ICC rates. We seek comment on these possibilities as well as the timing to reduce reciprocal compensation rates and wireless termination charges.

• **Timing:** We also seek comment on the appropriate timing of the overall transition and propose to complete the transition away from per-minute rates consistent with the implementation of long-term CAF support, so that all subsidies necessary to serve an area are explicit as part of whichever long-term CAF funding mechanism is adopted. We seek comment on the glide path to this end point.

43. As ICC rates decrease, we propose to adopt a mechanism for recovery, where necessary, which may include explicit universal service support and reasonable end-user charges. In so doing, we recognize that ICC revenues today remain an implicit subsidy for certain carriers, and we seek comment on how to structure the recovery mechanism to provide certainty and predictability during the transition. We also seek comment on how to structure this mechanism consistent with limiting burdens on consumers and constraining the size of the CAF.

44. By modernizing our policies for a broadband world and reducing the underlying incentives for wasteful arbitrage, we believe these reforms will promote investment in IP facilities and free up valuable resources, provide certainty and ultimately encourage new broadband investment and innovation.

III. **ROLE OF INTERCARRIER COMPENSATION AND UNIVERSAL SERVICE PROGRAMS**

45. Intercarrier compensation and universal service have long been intertwined. Historically, both universal service policies and intercarrier compensation policies worked in tandem to enable companies to provide affordable local phone service to residential consumers – which in some areas of the country requires recovery of network costs from sources other than those residential end-user customers.

46. **Pre-AT&T Divestiture.** A primary policy objective of regulators during the 20th century was to promote universal service through affordable local telephone rates for residential customers. To accomplish this objective, regulators created a patchwork of implicit subsidies. Thus, for example, regulators permitted higher rates to business customers so that residential rates could be lower, and they frequently required similar rates for urban and rural customers, even though the cost of serving rural customers was higher.\(^{27}\) Similarly, AT&T\(^{28}\) was permitted to charge artificially high long-distance toll rates, and then shared a portion of these interstate revenues with independent telephone companies and AT&T’s Bell Operating Companies (BOCs).\(^{29}\) These high long-distance rates enabled regulators to promote universal service through lower residential rates for the BOCs and independent local telephone companies.


\(^{29}\) The sharing of revenues was known as the “settlements” process and was a major source of support for small rural companies, in some cases representing as much as 85% of certain costs allocated to the interstate jurisdiction. See Gerald W. Brock, The Second Information Revolution 188 (2003).