UNIVERSAL SERVICE ASSURANCE:

Act Three of a Four Act Play

April 1997

TCG

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INTRODUCTION

In the Telecommunications Act of 1996, the United States Congress wrote Act One of an evolving universal service drama: it required universal service funding by all telecommunications carriers and eliminated the incumbent local exchange company stranglehold on universal service subsidies. Calling for the establishment of an equitable universal service mechanism, the 1996 Act ended forever incumbent local exchange carrier ("ILEC") claims that local exchange competition would endanger universal service.

The Federal-State Joint Board on Universal Service wrote Act Two of the universal service drama when it submitted its recommendations to the Federal Communications Commission ("FCC") last November. The FCC will write Act Three by May 8 when it is required by the Act to issue an order implementing the federal universal service requirements of the Act. With this its third paper on universal service, TCG highlights some of the issues that will be most crucial to ensuring that the FCC’s rule results in a fund that is fair, reasonable, and sufficient.¹

COST STUDIES AND BENCH MARKING

The major debate following the Joint Board’s recommendations has been over the size of the universal service fund. This debate has focused almost exclusively on computer models aimed at estimating the cost of basic service. The two leading models under consideration have predicted funding levels of between $5 billion and $15 billion annually. However, many observers interested in advancing the reform of universal service agree that the results of the two models can be reconciled by adjusting a relatively small number of assumptions and inputs. The adjustment should be made on a common sense basis so as to eliminate patently unreasonable assumptions— for example, the assumption that telephone poles would be used only by providers of basic telephone service, rather than by cable and electric companies. This will narrow the gap between the two models that have

been scrutinized and revised for several months and allow the FCC to select a model that is based on
the proper inputs. Once this is done (and TCG is confident that the FCC is fully capable of doing so),
the cost model will yield a reasonable output that can be reconciled with policy objectives. More
important, attention shifts (finally!) to the other half of the funding requirement equation: the
Affordability Benchmark.

AFFORDABILITY BENCHMARK

The affordability benchmark is the threshold above which support will be provided by the universal
service fund. Most consumers are able "to afford" a certain level of expenditure on telephone service.
(The exception is consumers with extremely low income, who qualify for "lifeline" subsidies.) If the
cost (determined as discussed above by cost studies) of serving a customer exceeds the affordability
benchmark, then that customer is eligible for universal service support

Nearly all of the funding requirement estimates that have appeared in the press (e.g., $5 billion and
$15 billion) are based on a benchmark of $20 per month per line, which is approximately the national
average monthly charge for basic service. However, this defies common sense, because telephone
customers generate far more revenue for their local exchange carrier than the monthly charge for
basic service (including the Subscriber Line Charge). To the extent that rates for basic service do not
cover the cost (forward-looking or embedded) of basic service, any shortfall may be more than
overcome by profits from other services. Vertical services (e.g., call waiting, call forwarding, etc.)
and long distance access charges produce substantial revenues for the local exchange carriers and
therefore must be included in the calculation to establish the required subsidy.

Indeed, the Joint Board's recommendation was to calculate the subsidy requirement as the difference
between total average nationwide revenue per line and the TSLRIC of those services, rather than the
difference between basic service rates and the TSLRIC of basic service. This is proper, given the

\[ \text{See Recommended Decision, paragraphs 310-311.} \]
likelihood that local telephone service is an especially effective loss leader: once a customer selects a local service provider, that provider has captured the exclusive right to sell that customer additional services. It is thus unreasonable and counterproductive to use $20 as the benchmark, because the effect would be to maximize the size of the universal service fund.

As compelling as the case is for basing the benchmark on total revenue per line, it suffers from one drawback. Rates for most incumbent local exchange carriers are - and probably will continue to be - regulated in some manner by state regulators, either through price caps or through rate of return rules. Revenue figures, therefore, vary considerably from state to state, more reflective of each state's regulatory policies than of the underlying cost of service. Basing the benchmark strictly on revenue per line would over-reward, with greater subsidies, those states that have unrealistically low local service rates for all customers. The antidote to this perverse reward scheme, of course, is to find some other benchmarking tool that is independent of regulatory rate making: proxy cost studies.

As was noted above, the FCC and the Joint Board have spent much of the last twelve months evaluating various cost models to estimate the cost of basic service. These models can produce an independent estimate of the cost of telephone service and therefore can be used to establish the benchmark, a proposal under consideration by the state staff of the Joint Board. Support thresholds, therefore, should be based on relative costs and on revenue per line. That is, the minimum benchmark should equal the average revenue per line. For example, if the national average cost for basic service were $15/month, and the national average revenue per line were $30/month, customers in high cost areas should be eligible for universal service support if the cost of serving them exceeded $30/month. In effect, the present formula for calculating the threshold support would

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4 Embedded costs of the ILECs are currently used to establish support eligibility under the existing Universal Service Fund. Like the revenue benchmark, however, embedded costs raise issues of perverse incentives and independence.
change from 115% of cost to 200% of cost. The FCC must avoid creating any incentive for carriers (or regulators) to reduce revenues in order to increase their draw from the universal service fund, which would be both uneconomic and anticompetitive.

CONNECTING SCHOOLS AND LIBRARIES

The 1996 Telecommunications Act added a new feature to universal telecommunications service: support for schools and libraries. Under the Act, schools and libraries are entitled to a discount on their telecommunications services. The carrier offering the discounted service will be reimbursed for the amount of the discount from the federal universal service fund. To implement this section of the Act, the Joint Board proposed allocating $2.25 billion annually to fund discounts for schools and libraries upon a "bona fide request" from the school.

This feature of the 1996 Act has the potential to generate considerable competition for school and library contracts, but only if one condition is met: schools and libraries must solicit competitive bids from carriers as a fundamental prerequisite to a "bona fide request" for support. Schools and libraries have a tremendous opportunity to obtain better service at lower prices. If they have locked themselves into contracts with incumbent local exchange carriers, that opportunity will be lost. Although in some instances existing contracts have been awarded via competitive bidding, the nascent state of competition guarantees that most existing contracts were awarded to the incumbent local exchange carrier by default. If such contracts are permitted to remain in place, competitors will be effectively barred from potentially lucrative markets and the schools and libraries will remain captives of the incumbent monopolists. Schools and libraries that have contracted with the ILECs without entertaining bids from other providers, therefore, should be required to reopen those contracts to bidding if their carrier is to receive support.

The Joint Board's innovative recommendation to initiate Requests for Proposals ("RFP") via an Internet web page will minimize any burden the schools and libraries may shoulder as they take
advantage of their new freedoms. Their efforts will be well rewarded by the new competitive marketplace for local telecommunications services.\footnote{Given the limited state of competition today and in the near future, however, it is unlikely that every RFP will elicit a competitive response. In those instances where contracts are awarded to the incumbent local exchange carrier by default, those contracts must be for a term of no more than three years.}

As for the RFPs themselves, TCG recommends that bidding for support-eligible contracts be limited to one round of sealed bids. Such an approach will not only minimize the burdens on the schools and libraries, but it will also encourage “best behavior” on the part of carriers. The alternatives - multiple-round auctions - are complicated undertakings requiring substantial oversight to prevent “gaming” and to ensure fair treatment of all parties. The best way to minimize the problems associated with an RFP is to encourage the bidders to make their first offer their best offer. It has been TCG’s experience in arbitration proceedings, for example, that when carriers are forced to make a best and final offer, resolution is achieved quickly and more efficiently than more complicated procedures.

TCG strongly believes that it is well within the Commission’s authority to require a school or library to complete an RFP. Should a school or library wish to take advantage of the universal service funds for which it is eligible, therefore, the Commission is justified in requiring the institution to terminate its existing contract with the incumbent local exchange carrier, to issue an RFP, and to entertain competitive bids for contracts. Such a requirement would not apply to existing contracts that were awarded to competitive local exchange carriers who, by definition, must have underbid the incumbent local exchange carrier to win the contract.

**ADMINISTRATIVE DETAILS**

*Single-Connection Support:* In Paragraph 89 of its Recommended Decision, the Joint Board proposed that support to residential customers “... be limited to those services carried on a single
connection to a subscriber’s principal residence.” The Board further concluded “... that support for a single connection will permit a household complete access to telecommunications and information services.” TCG agrees with both the Joint Board’s reasoning and its conclusion. Those who oppose the proposed policy argue that it will require extraordinary enforcement efforts by the Commission or by the Fund administrator. Of course, the cost of implementing any audit and control system must be measured against the expected value of the fraud to be prevented. Under the proposal outlined below, however, the integrity of the universal service support system can be maintained simply and at relatively low cost.

TCG proposes that the fund administrator shoulder most of the work, with intervention by state commissions and the FCC only to settle disputes. State commissions would hear disputes first, and the FCC would hear only appeals of state commission decisions. Once properly established, the fund should be self-supporting and self-policing, and intervention by either a state commission or the FCC should be infrequent.

TCG’s solution has three components: 1. Customer certification; 2. Database of support-eligible locations; 3. Periodic audits of statistically significant samples of support recipients.

**Customer Self-Certification:** TCG proposes to require customers to designate one carrier as their primary local exchange carrier to whom support will flow for the provision of the customer’s first line. Additional lines, whether provided by the primary LEC or some other LEC, would not be eligible for support.

**Database of Support-Eligible Locations:** This presents the largest technical hurdle, but there are two options readily available.

1. **The First Option** would use existing Customer Account Record Exchange (“CARE”) databases maintained by each local exchange and interexchange
carrier. Each record in a CARE database contains the service address for every customer in each local exchange carrier’s service territory. The strength of the CARE approach is that it is already automated and available. In addition, LEC CARE records can be compared to IXC CARE records as a preliminary, but by no means foolproof, check on the accuracy of the records. The weakness of the CARE approach is that data entry is not necessarily uniform and 100% accurate. Also, the IXC-LEC check is not foolproof and can be circumvented (e.g., a customer could choose a different LEC and a different IXC for second-line service.)

2. **The Second Option** would rely upon county and municipal records and databases to identify the addresses of high cost consumers. The strength of this approach is that there is unlikely to be any duplication of records or incentive to misreport data. The weakness is that county and municipal records may not be automated or readily available.

One or the other of these databases (CARE or government) would be mapped into the database of high cost areas as established by the cost studies to create a new Universal Service database ("USDB") of those addresses in high cost areas. The criteria for extracting records from the CARE or government databases might be 5-or 9-digit zip codes, at least initially. Other extract criteria might be added or substituted to develop a more refined USDB.

The fund administrator would check each carrier’s request for funding for a particular address against the records in the USDB to determine the validity of the request. Multiple support requests for one address, for example, or requests for addresses not in the USDB would be denied pending further investigation. This would be the primary check point of the system’s integrity.
Periodic Audits. Finally, to further ensure the integrity of this system, an independent auditor would periodically verify the accuracy of the database and the requests for support. The audits would comprise a statistically significant subset of database records and requests and need not encompass the entire database or every request. Deliberate attempts to defraud the universal service fund, by carriers or customers, should be punished with stiff fines.

Providing support to only the customer’s primary residence adds an additional wrinkle to the audit and control of the fund. At this time, TCG can recommend only social security numbers as the means of identifying customers with telephone service to multiple dwellings. The CARE records have space for each customer’s SSN, and county and municipal governments certainly have access to that information for their citizens (non-citizens pose a problem in this regard). In a manner similar to the screening for multiple requests for support for one address, the administrator would examine the USDB for identical social security numbers. If a social security number appears in the database more than once, the Administrator would request the respective state commissions to investigate to determine the customer’s primary residence. This approach is not foolproof either, however, as a married couple may order telephone service in the husband’s name (and SSN) at one residence and in the wife’s name (and SSN) at the other residence. Nevertheless, it appears to be the best approach available.

THE GREAT INTERSTATE/INTRASTATE DEBATE

The Telecommunications Act of 1996 states that “[e]very telecommunications carrier that provides interstate telecommunications services shall contribute, on an equitable and nondiscriminatory basis, to ...” the universal service fund. Ask two people to explain what this means, and you are likely to get two vastly different interpretations. On the one hand, there are those who interpret this section to restrict the FCC to assessing only the interstate revenue of interstate carriers. On the other hand, there are those who interpret this section
to allow the FCC to assess both the inter-and intra-state revenue of interstate carriers. Of course, reasonable people can disagree on this issue and it is not our intention to adjudicate it here. Each interpretation, however, has very different implications for the nation’s approach to universal service.

Although the jurisdictional separation between state and interstate telecommunications is blurring, federal efforts to assess intrastate revenue for universal service purposes will inevitably raise legal issues regarding states’ rights. To avoid a constitutional confrontation with the states, the FCC may feel compelled to limit assessments to interstate revenue only. But if the assessments are limited, fairness and competitive neutrality mandate a smaller federal fund. Even so, CLECs, who derive a higher proportion of their total revenue from interstate services than incumbent local exchange carriers, could conceivably end up paying a greater share of their total revenue into the fund than the ILECs. The anticompetitiveness is only compounded by the fact that the ILECs will be the sole recipients of universal service funding, at least for the immediate future.

THE SIZE OF THE FUND

As indicated earlier, a benchmark that properly accounts for all of the revenue generated for a local exchange carrier by its captive customers will significantly reduce prospective universal service funding requirements. Indeed, when all such revenue is accounted for, current funding levels of approximately $1.1 billion may be more than sufficient to meet the nation’s universal service high cost needs. The FCC’s primary objective, therefore, is to make current universal service support competitively-neutral in terms of contributions and distributions.

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6 $750 million of USF and $300 million for long term support. The DEM weighting program, which amounts to another $300 million, has accomplished its goals and the FCC should eliminate it.
Although the Joint Board recommended $2.25 billion annually to support telecommunications services for schools and libraries, such funding may far exceed the amount necessary. TCG and other CLECs have successfully won contracts for schools and libraries, saving those customers hundreds of thousands of dollars. \(^7\) Competitive bidding in the future will bring additional cost savings to these customers. Furthermore, as more schools become wired, either on their own or via “Net Days” programs, additional support will be unnecessary. Perhaps as little as half of the Joint Board’s original recommendation, therefore, may be needed in the future. Since the actual needs for rural health care have not yet been determined, the Commission should adopt a method for determining the needs rather than an arbitrary figure. For the purpose of estimating the potential size of the universal service fund in total, a placemark figure of $400-500,000 seems reasonable. \(^8\) Expanding the Lifeline and Linkup America programs may add another $650 million. This would place the total Federal Universal Service Fund at between $3 billion and $4 billion annually.

TCG notes that many parties representing all sides of the issue have recommended low universal service funds. Low does not mean inadequate, and there is nothing in the Act that precludes the upward or downward adjustment of the initial universal service fund. To initiate the fund it is prudent to satisfy demonstrated need, not wish lists, and to take into account the compelling fact that once competition is robust, most customers will become attractive to most carriers, who will vie to provide better service at lower prices, thus minimizing the requirements for universal service subsidies.

\(^7\) For example, California’s Oakland Unified School District has selected TCG as its local telephone company.

\(^8\) Competition is driving down the costs to health care providers as well: in New York City, TCG now serves 28 major hospitals.
CONCLUSION: ACT FOUR IS YET TO COME

A properly calculated, reasonably sized Federal Universal Service Fund will add needed certainty to the cost picture for new competitive local exchange carriers. However, the FCC’s ruling on the benchmarks, the administration of the fund, and the collection methods for creating the fund will not constitute the final Act of the universal service drama. States still may write Act Four, for the Telecommunications law gives them the authority -- though not the obligation -- to establish their own universal service funds, and many states have already begun to consider the option -- or as in the case of California, have already established statewide universal service funds. ILECs can be expected to continue to try to use universal service as a shield to protect themselves from competition especially in the state jurisdictions. Thus it is all the more important for the FCC to establish reasonable limits on the national fund.
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 Act Three of a Four Act Play

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Although the jurisdictional separation between state and interstate telecommunications is blurring, federal efforts to assess intrastate revenue for universal service purposes will inevitably raise legal issues regarding states’ rights. To avoid a constitutional confrontation with the states, the FCC may feel compelled to limit assessments to interstate revenue only. But if the assessments are limited, fairness and competitive neutrality mandate a smaller federal fund. Even so, CLECs, who derive a higher proportion of their total revenue from interstate services than incumbent local exchange carriers, could conceivably end up paying a greater share of their total revenue into the fund than the ILECs. The anticompetitiveness is only compounded by the fact that the ILECs will be the sole recipients of universal service funding, at least for the immediate future.

**THE SIZE OF THE FUND**

As indicated earlier, a benchmark that properly accounts for all of the revenue generated for a local exchange carrier by its captive customers will significantly reduce prospective universal service funding requirements. Indeed, when all such revenue is accounted for, current funding levels of approximately $1.1 billion may be more than sufficient to meet the nation’s universal service high cost needs. The FCC’s primary objective, therefore, is to make current universal service support competitively-neutral in terms of contributions and distributions.

Although the Joint Board recommended $2.25 billion annually to support telecommunications services for schools and libraries, such funding may far exceed the amount necessary. TCG and other CLECs have successfully won contracts for schools and libraries,

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6 $750 million of USF and $300 million for long term support. The DEM weighting program, which amounts to another $300 million, has accomplished its goals and the FCC should eliminate it.
ILECs can be expected to continue to try to use universal service as a shield to protect themselves from competition especially in the state jurisdictions. Thus it is all the more important for the FCC to establish reasonable limits on the national fund.

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CONCLUSION: ACT FOUR IS YET TO COME
A properly calculated, reasonably sized Federal Universal Service Fund will add needed certainty to the cost picture for new competitive local exchange carriers. However, the FCC’s ruling on the benchmarks, the administration of the fund, and the collection methods for creating the fund will not constitute the final Act of the universal service drama. States still may write Act Four, for the Telecommunications law gives them the authority — though not the obligation — to establish their own universal service funds, and many states have already begun to consider the option — or as in the case of California, have already established statewide universal service funds.

7 For example, California’s Oakland Unified School District has selected TCG as its local telephone company.

8 Competition is driving down the costs to health care providers as well: in New York City, TCG now serves 28 major hospitals.