

SEPARATIONS

**A White Paper To The
State Members
Of The
Federal-State Joint Board
On
Universal Service**

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February 7, 2011

DISCLAIMER

THIS WHITE PAPER HAS BEEN PREPARED BY MEMBERS OF THE STATE STAFF OF THE FEDERAL-STATE JOINT BOARD ON UNIVERSAL SERVICE AND ITS CONSULTANTS IN ORDER TO ASSIST THE RELEVANT DELIBERATIONS OF THE STATE MEMBERS OF THE JOINT BOARD. THE ANALYSIS AND VIEWS EXPRESSED IN THIS WHITE PAPER ARE THOSE OF THE AUTHORS AND DO NOT REFLECT THE FORMAL POSITIONS OR OPINIONS OF THE REMAINING STATE STAFF, STATE MEMBERS, OR GOVERNMENTAL/NON-GOVERNMENTAL ENTITIES THAT CURRENTLY EMPLOY THESE AUTHORS.

Separations

This paper discusses the extent to which separations should continue to be part of the inputs for calculating federal universal service support or as a guide to how support funds should be used.

I. Separations and Ratemaking

One of the complexities of telecommunications regulation is that carriers use the same plant to provide jurisdictionally intrastate services, jurisdictionally interstate services, and non-regulated services. Services provided by incumbent local exchange carriers (ILECs) in most states are subject to economic regulation¹ by the FCC for interstate services and by the states for intrastate services. So long as dual economic regulation remains, some means must exist to virtually divide the company into an intrastate component and an interstate component. This conclusion is supported by past court decisions that recognize a constitutional necessity for distinguishing between the jurisdiction of interstate and intrastate regulators.²

The separations rules of 47 C.F.R. Part 36 are the current method of making the division between intrastate and interstate components. Separations rules apply only to ILECs.³ Some separations rules apply to plant and operating costs, while others apply to revenue, taxes and reserves.⁴ Under the rules for costs, adding the interstate portion plus the intrastate portion should ideally produce 100% of unseparated costs.⁵

¹ The scope of economic regulation in each jurisdiction can include setting rate-of-return carrier rates, prescribing exogenous adjustments to price cap carrier rates, and providing universal service funding.

² *Smith v. Illinois Bell Telephone Co.*, 282 U.S. 133, 148-149 (1930) (“The separation of the intrastate and interstate property, revenues and expenses of the company is important not simply as a theoretical allocation to two branches of the business. It is essential to the appropriate recognition of the competent governmental authority in each field of regulation. . . . [T]he validity of the order of the state commission can be suitably tested only by an appropriate determination of the value of the property employed in the intrastate business and of the compensation receivable for the intrastate service under the rates prescribed.”); *see also Crocket Telephone Co. v. FCC*, 963 F.2d 1564, 1571 (1992) (“Lest we hide our holding in verbiage, we summarize. *Smith v. Illinois Bell* recognized a constitutional necessity for distinguishing between the jurisdiction of interstate and intrastate regulators.”).

³ There are exceptions. Certain ILECs do not perform separations studies and instead develop rates on an “Average Schedule” basis using a formula to estimate costs. Alascom, Inc., an Alaskan incumbent interexchange carrier, is subject to jurisdictional separations even though it is not an ILEC.

⁴ 47 C.F.R. § 36.1(a).

⁵ This is not exactly true because states are free to set depreciation rates as they wish, and not all states match the FCC’s depreciation rules.

If separations is done properly, the ILEC's operation in each jurisdiction has an opportunity to establish just and reasonable rates for regulated services within its realm. In each jurisdiction the regulated rates should not be so low as to create a risk of confiscating the ILEC's property, and they should not be so high as to require customers to pay more than just and reasonable rates. Further, for each jurisdiction, there should be a match between allocated costs and jurisdictional authority over revenues and services.

"Categorization" is a separations process. ILECs must subdivide broad accounting categories of investment and expense into categories and sub-categories. For example, by categorizing its broad "Cable and Wire Facilities" (C&WF) investment, an ILEC obtains a value for "subcategory 1.3," which is the subcategory for "subscriber or common lines that are jointly used." This is an important category because it holds a large amount of investment.

Under separations rules, the resulting quantities are multiplied by different "factors" or percentages that divide costs between the intrastate and interstate jurisdictions. The interstate factor and the intrastate factor for a particular cost add to 100%. The "gross allocator" is an important factor because it applies to C&WF category 1.3, a large investment category. The gross allocator assigns 25% of loop cost to the interstate jurisdiction and 75% to the state jurisdiction. Another factor is "DEM" (dial equipment minutes), a usage-based factor that allocates switching costs between the jurisdictions based on measured switch usage.

While separations rules apply solely to ILECs, even within that limited set, they have real effects primarily over rate-of-return companies.⁶ Having been written before broadband was widely used, separations rules do not aptly measure broadband costs provided over DSL facilities. Having been written for wireline networks, separations rules cannot aptly measure wireless costs, and do not purport to apply to wireless carriers.

For rate-of-return companies, separated cost results are the basis for setting interstate access rates. Many states use separations results to set intrastate access rates, local rates, intrastate toll rates, and at times to determine universal service payments. For price cap companies, rates are not necessarily based on embedded costs. However, changes in separations procedures may lead to "exogenous" changes that affect price cap rates. In addition, some states may have the ability to rebase a utility's price cap rates based on a review of separated results. The separations process therefore affects intercarrier compensation rates and potentially affects intercarrier compensation reform.

The separations process has been subject to a freeze for roughly a decade. The freeze allows carriers to set their jurisdictional costs based on historic relationships in plant categories and historic jurisdictional factors from roughly a decade ago rather than update the information based on current use of plant.

⁶ Price cap ILECs are only affected by separations changes if a separations rule change is considered an "exogenous change."

II. Separations and Universal Service

A. Background

For decades, separations has been used to further universal service goals. Prior to the early 1980s, separations, through a series of regulatory plans, gradually increased the percentage of non-traffic sensitive (NTS) costs -- mostly loop costs -- assigned to the interstate jurisdiction.⁷ This policy intentionally promoted higher interstate per-minute toll rates and lower flat local rates for all local subscribers, with the goal of encouraging local and toll subscribership.

Much of that changed in the early 1980s when the FCC limited the interstate share of common NTS loop costs to 25%. The combined effect of these changes was to reduce interstate toll costs (and ultimately toll rates) and increase state costs. The FCC, recognizing that these changes could unduly affect local rates for some carriers, instituted various support mechanisms many of which are explained in the next section.

At the same time, the FCC instituted the federal Subscriber Line Charge (SLC) to recover a large share of interstate costs. The arrival of the SLC shifted recovery of interstate revenue requirement from per-minute charges to flat monthly charges. This meant that cost shifts to interstate through a separations change might lower local rates (and state access) but at the same time would increase SLC fees for the same customer base. Potentially, the customer might see little change in overall flat monthly fees.

The FCC's change in policy had another side effect. States were responsible for 75% of common NTS loop costs while the interstate jurisdiction was responsible for only 25%. This increased the likelihood of a disparity between state and interstate access rates.

Today's numerous universal service mechanisms remain entwined with separations in several ways. Each of the programs was created to meet a specific need; each has its own history and unique mechanism.

1. High Cost Loop (HCL) Support

The HCL support mechanism supports loop revenue requirement. HCL support is paid to rural carriers.⁸ In defining the level of support, HCL relies on using two plant "sub-categories" defined by separations rules.⁹

⁷ By 1976 the average interstate NTS percentage was 20.37% among the Bell operating companies. However, individual carrier percentages were as high as 53% and as low as 13.4%.

⁸ 47 C.F.R. § 36.631(c) & (d).

⁹ Only some sub-categories are recognized for HCL support. For purposes of determining HCL support, loop investment is the sum of Joint-Use Cable and Wire Facilities that connect end-users with wire centers (C&WF Category 1.3) and Central Office Equipment that supports transmission of telecommunications on joint-use cable and wire facilities (COE Category 4.3). The HCL cost formula includes loop cost related to Category 1.1 and 1.2 private lines. However, these private lines do not receive support.

The mechanism for calculating HCL support does not separate the loop costs and investment into the state and federal jurisdictions. Instead, HCL support is based on the total or unseparated loop revenue requirement (loop cost). From this, NECA subtracts a number (115% of “adjusted NACPL”).¹⁰ If the difference is positive, the carrier receives a portion of that difference as support. As the system works today, this mechanism provides no support unless the carrier’s annual unseparated cost per loop exceeds \$43.93 per month (\$527.11 per year).¹¹ In 2001, carriers with costs above \$23.00 per month (\$276.00 per year) received HCL support.¹²

Although HCL support is based on unseparated cost, it does rely on separations factors. Under separations rules, the “gross allocator” assigns 25% of each carrier’s loop costs to interstate. Once a carrier’s loop costs exceed 115% of the adjusted NACPL, then 65% of all additional loop costs (or 75% in some cases) are supported from the HCL fund. The percentages were selected to be complementary. When the 65% HCL support is added to the 25% separations factor, the total is 90%. This means that a high-cost carrier (with costs above 115% of the adjusted NACPL) receives an incremental \$0.90 of revenue from federal sources for every incremental \$1.00 in its unseparated incremental loop cost.¹³

Under the separations manual, HCL support appears as an “expense adjustment” to interstate revenue requirement.¹⁴ The net effect is to reduce each high-cost carrier’s net intrastate loop costs to a level somewhat above the adjusted NACPL, which in turn provides an opportunity for state commissions to approve reasonable local exchange rates. In that sense HCL support is “tagged” for the intrastate jurisdiction even though it technically is recorded in the interstate jurisdiction.

2. Local Switching Support

The Local Switching Support (LSS) mechanism supports switching investment. LSS is paid to smaller rural companies. The LSS mechanism transfers a portion of each affected carrier’s unseparated local switching revenue requirement from the state jurisdiction to the interstate jurisdiction. That transferred cost is then recovered through explicit support payments. For that reason, LSS is intended to benefit the state jurisdiction.

¹⁰ Under the current rules, the number subtracted is nominally 115% of the adjusted national average cost per loop (NACPL). For many years, however, NACPL has been adjusted annually to meet the high cost loop funding cap. The funding cap is equal to last year’s cap times the change in the sum of inflation and percent change in supported lines. Because the percent change in lines has been negative, the funding cap amount has been decreasing in recent years, which further increases the adjusted NACPL.

¹¹ The adjusted NACPL is now \$458.36 per line per year.

¹² In 2001 the NACPL was \$240.00 per line per year.

¹³ For this reason, the design of the HCL support mechanism would likely require review should there be a change in the basic separations factor for loop costs. This question is discussed in more detail below.

¹⁴ The process under the manual is somewhat complicated. First the amount of HCL support is calculated in accordance with Part 36. Then, costs in equal amount are transferred from the carrier’s intrastate revenue requirement to the carrier’s interstate revenue requirement, a process called an “expense adjustment.” HCL support then pays the exact amount that was transferred to interstate.

Because “unseparated switching revenue requirement” is one of the elements used to calculate LSS support, the separations categorization rules come into play.¹⁵ The other major input to LSS support is the separations factors for switching, which is currently based on frozen 2000 switching usage data. To the normal interstate “DEM” factor is added another percentage which is based in part on company size and in part on 1996 switch usage. Small companies receive more LSS support than larger companies, because their factor shift to interstate is a higher multiple¹⁶ of their 1996 measured DEM. Carriers with more than 50,000 per study area are ineligible.¹⁷ Carriers that had high interstate usage in 1996 today generally receive more LSS support than other carriers. In this sense, the LSS program today is a “factor shift” rule, which inevitably produces a revenue requirement shift.

LSS was originally called “DEM Weighting.” In its original form, the mechanism also contained a factor shift, but no explicit support payment was made. Instead, costs were shifted to the interstate jurisdiction and were later recovered from interstate access charges. In 1998, this implicit support mechanism was replaced with LSS, which today provides an explicit means of recovering the costs that are shifted to interstate through the expense transfer.

3. Non-rural Model Support

“Forward-looking” or “model-based” support is provided to non-rural carriers. The mechanism attempts to estimate the cost of an efficient provider and considers all forward-looking costs associated with supported services, including local exchange service.¹⁸ Cost amounts are calculated by a computer model and not embedded costs. Carriers therefore do not need to use separations categories to receive support. The FCC intended non-rural model support to be used to reduce intrastate rates.¹⁹

Model-based support is based on the difference between the forward-looking costs in each state and a number based on the national average cost among non-rural companies. After that difference is calculated, it is reduced by 24 percent.²⁰ The 24 percent reduction is based on the fact that, on average, 24 percent of the cost of providing telephone services is generally

¹⁵ The separations category for local switching investment (Central Office Equipment Category 3) is used to calculate the unseparated switching revenue requirement. *See* 47 C.F.R. § 54.301(a); 47 C.F.R. § 36.125.

¹⁶ This multiple is also commonly referred to as a “weight,” which is why LSS was originally called “DEM Weighting.”

¹⁷ For example, companies with less than 10,000 lines receive a weighting of 3.0 which provides a benefit of 200% of unweighted DEM interstate assignment. Companies with 40,000 lines receive a weighting of 2.0 or a benefit of 100% of unweighted DEM, half as much benefit as the smaller company. 47 C.F.R. § 36.125(f).

¹⁸ CC Docket No. 96-45, Report and Order, 12 FCC Rcd 8776, (1997), at ¶ 224.

¹⁹ *See* 36 C.F.R. § 36.631(c) (Expense adjustment (additional interstate expense allocation) for non-rural telephone companies serving study areas reporting 200,000 or fewer working loops equals model-based support).

²⁰ 47 C.F.R. § 54.309(a)(4).

separated to the interstate jurisdiction through separations. Model-based support therefore depends indirectly on separations factors.

4. Interstate Access Support (IAS)

IAS provides revenue support to price cap carriers. IAS was created to replace some of the ILEC revenue lost through interstate rate design changes under the CALLS plan.²¹ IAS allowed the FCC to avoid increasing the cap on residential SLCs beyond \$6.50.²² IAS support is intended to benefit only the interstate jurisdiction.

The national total of IAS support was tied to the initial amount of allowed interstate common line, marketing and transport revenues.²³ That amount, in turn, depended on separations factors from the 2000 operating year and separations rules from 2000.

5. Interstate Common Line Support (ICLS)

ICLS provides revenue support to rate-of-return carriers. The ICLS mechanism was created in 2001 to replace some of the ILEC revenue eliminated through interstate rate design changes.²⁴ ICLS allowed the FCC to eliminate the carrier common line access charge for rate of return carriers and to avoid increasing the cap on residential SLCs beyond \$6.50.²⁵ ICLS support is intended to benefit only the interstate jurisdiction.

ICLS is a cost-based mechanism that supports the difference between a carrier's "interstate common line revenue requirement" and its interstate common line revenue.²⁶ In order to calculate the former, ICLS uses both separations categories and factors. The gross allocator that allocates 25 percent of loop investment and expense to the interstate jurisdiction is particularly important.²⁷

²¹ As did the CALLS plan, the MAG plan eliminated the "carrier common line charge" paid by interexchange carriers. 47 C.F.R. § 69.104(n) & (o).

²² IAS and the increase in the residential SLC were the primary reasons price cap carriers were able to set interstate common line access rates at zero. In many instances, this made interstate access rates substantially lower than comparable intrastate access rates.

²³ A portion of total transport revenue associated with the transport interconnection charge was assigned to the common line basket.

²⁴ When the ICLS mechanism was initiated, the FCC eliminated the interstate carrier common line rates paid by interexchange carriers and raised the cap on the residential SLC from \$3.50 to \$6.50. Thus, the decrease in intercarrier (carrier common line) revenue was offset by both an increase in universal service support and by an increase in end-user charges.

²⁵ ICLS and the increase in the residential SLC were the primary reasons rate-of-return carriers were able to set interstate carrier common line access rates at zero. In many instances, this made interstate access rates substantially lower than the comparable intrastate access rates.

²⁶ 47 C.F.R. § 54.901.

²⁷ For this reason, a change in the basic separations factor for loop costs would likely require review of the design of the ICLS support mechanism. This question is discussed in more detail below.

6. State Support

State universal service programs often respond to intrastate revenue requirements. For that reason, state USF programs can depend on both separations categories and separations factors. Many states continue to authorize implicit support mechanisms such as study area wide average local service pricing or value of service pricing, and this has been upheld by the courts.²⁸

7. Implicit Broadband Support

The FCC has allowed all rate of return carriers to treat costs for broadband Internet access transmission as Title II regulated costs that flow through the separations process.²⁹ As a result, DSL loop transmission costs are included in the costs used to determine HCL support, ICLS support, the SLC, local rates, and possibly other regulated services for these companies. Existing federal support mechanisms and voice rates therefore implicitly support the loop costs associated with broadband internet access transport.³⁰

8. Summary

The following table summarizes how separations rules relate to universal service.

Program	Support Calculation		Intended Jurisdictional Beneficiary (“tag”)
	Uses Sep. Categories	Uses Sep. Factors	
HCL	Yes	Yes (indirectly)	State
LSS	Yes	Yes (DEM)	State
Model	No	Yes (indirectly)	State
IAS	No	Yes (revenue accounts)	Interstate
ICLS	Yes	Yes (overall factor)	Interstate

Similarly, any change in non-regulated cost allocation or the separations categories that comprise the revenue requirement could also change ICLS support amounts.

²⁸ The Tenth Circuit Court of Appeals ruled that Congress did not “expressly foreclose the possibility of the continued existence of state implicit support mechanisms that function effectively to preserve and advance universal service.” *See Quest Commc’ns Int’l, Inc. v. FCC*, 398 F.3d 1222, 1233 (10th Cir. 2005).

²⁹ *Wireline Broadband Order*, FCC 05-15, at ¶¶ 128-138.

³⁰ NECA DSL Broadband Internet Access Transport rates are developed assuming no contribution to loop costs even though the DSL service depends on the loop.

Program	Support Calculation		Intended Jurisdictional Beneficiary (“tag”)
	Uses Sep. Categories	Uses Sep. Factors	
State	Yes	Yes (overall factor)	State

III. Two Paths Ahead for Universal Service

It is likely that universal service will eventually include broadband services. Four years ago the Joint Board recommended including broadband in the list of supported services. More recently, the National Broadband Plan proposed that the FCC should conduct a comprehensive reform of universal service and intercarrier compensation in three stages to close the “broadband availability gap.”³¹ In addition, the FCC is currently preparing to release an NOI or NPRM asking questions about how to adapt high-cost programs to broadband technology.

This paper addresses two distinct methods of approaching separations and universal service for wireline rural carriers. Both approaches assume that the FCC will continue to operate a cost-based high-cost support program for broadband that will replace similar current programs such as HCL, LSS, Model-based Support and ICLS.

The first approach is to redesign the new programs for broadband but with minimal (or possibly no) interactions with separations. This approach takes a “total company financial view” of supported carrier finances.

The second approach is to continue to develop support while considering the jurisdictional nature of costs. This would require replacing the existing separations rules with an updated system that identifies broadband costs and then supports those costs with specific universal service mechanisms.³²

IV. Minimal Dependence on Separations

The first path, the “total company financial view,” is to redesign new broadband-compatible high-cost support programs using cost-based principles, but with minimal reliance on separations categories and factors to calculate support amounts.

A total company financial view would consider the costs and revenues generated by the carrier and its affiliates within a single state. It will be somewhat challenging to define those borders. A supported company might have affiliates engaged in unrelated industries ranging

³¹ FCC, *Connecting America: The National Broadband Plan* (March, 2010) at 135.

³² This second approach would establish new categories and factors that are relevant to the broadband world and to networks that provide multiple types of narrow band and broadband services.

from railroad car leasing to horse farms. Obviously, those types of affiliates should not be included. The system would, however, include affiliates that use the basic network infrastructure to deliver their services and would consider the costs and revenues of all services provided on the common network.³³ Internet and voice services provided over the same distribution network would definitely be included.

A company and its affiliates may also have operations that span several states. Costs and revenues would have to be developed separately for each state operation.

Revenue expectations might have to be set for all service groups, including intercarrier services and broadband services. For example, it may be necessary to impute minimum revenue levels to protect against the possibility that support payments are used to subsidize unduly low rates. As another example, determining support needed for unserved areas could require estimating average revenues per unit (ARPU)³⁴ and take-rates. The FCC performed a similar analysis in the Broadband Availability Gap Paper, except that in a total company approach, all relevant revenues would be considered, including broadband and voice revenues.³⁵

The Joint Board would need to decide explicitly whether to include video services.³⁶ Video services need special consideration because small carriers often find today that the high cost of video content makes the service unprofitable. Many carriers therefore offer video services as a loss leader in order to retain customers. If video costs and revenues are included in the support calculation, the resulting support amount could eventually be used to support video content providers rather than the broadband infrastructure. One possible solution to this problem would be to exclude the video service revenue and costs from the total company financial view. Another possibility is to impute a lease payment from the video affiliate to the telephone carrier that owns the broadband infrastructure.³⁷

The Joint Board would need to decide explicitly whether to include wireless services. If a company's wireless costs and revenues are included in the support calculation, special

³³ In this context "common" does not refer to common carriage but to the base network that enables telecommunications and broadband related services.

³⁴ FCC, *The Broadband Availability Gap*, OBI Technical Paper No. 1 (April, 2010) at 33-39. For example, if policy makers are concerned that the unbundled flat rate for local voice service might be too low, a revenue benchmark for local service could be included in the plan. The carriers' revenue could be calculated using a benchmark guideline for local service, such as \$20 per month for residential local service (the \$20 benchmark would be the sum of the local rate, interstate and intrastate SLCs and required charges). Similar expectations could be established for Internet services and bundled services.

³⁵ FCC, *The Broadband Availability Gap*, OBI Technical Paper No. 1 (April, 2010) at 49.

³⁶ Because mobility services generally use a different last mile network and compete for wireline subscribers, affiliates providing wireless services would not necessarily be included in the affiliate list of a wireline ETC.

³⁷ A state commission conducting an intrastate rate case would also have to determine the reasonable imputed lease payment. State commissions have shown remarkable ingenuity in determining rates for a variety of products such as UNE rates. Therefore, a solution to this problem should be within the jurisdiction and ability of state commissions.

treatment might be needed. The FCC has proposed to separately fund mobility. The two programs would have to be coordinated to prevent double recoveries and to manage eligibility.

Existing universal service mechanisms are based on cost estimates that do not recognize jurisdictional boundaries. The HCL, LSS, and Model-Based support mechanisms each estimate the total regulated “unseparated” costs of providing voice services and, to a limited extent, broadband services.³⁸ A new total company approach would go beyond present programs, however, in considering all revenues and costs for both “regulated” and “non-regulated” communications services.

The total company method can define costs using embedded cost methods, using a forward-looking cost model, or using a combination of the two. In any case, the new mechanisms will probably be more complex than present mechanisms, because the costs and revenues from a wider variety of services (i.e., voice, data, and possibly video) must be estimated.

The principal advantage of the total company approach is that it could make universal service programs more effective at preserving universal service. With most carriers now offering a range of regulated and unregulated services, losses in an unregulated area can drive an ILEC into bankruptcy. Bankruptcy is no longer a remote possibility for ILECs, as Hawaii, Maine, New Hampshire, and Vermont have discovered. A support system that focuses only on regulated operations therefore can be victimized by economic forces that are beyond its horizon of recognized events. A total company approach utilizes support and revenue estimates that are closer to the financial facts that allow supported companies to continue operating.

The reverse side of the same coin is that a total company financial view could make the use of support funds more effective. Support would be calculated taking into consideration the broad range of revenues generated by modern networks. In contrast, existing programs have often assumed that the only revenues available to carriers are switched voice revenues.³⁹ These networks actually provide local voice, toll voice, “vertical” services, intercarrier services (including special access), broadband Internet, and sometimes video. Future high-cost mechanisms could demand less funding if they recognize all revenue streams.⁴⁰

A total company financial view may eliminate the need to use conventional separations categories and factors as inputs in calculating total company universal service support. In recent years, both separations and universal service changes have been made more difficult because of

³⁸ While these programs do not explicitly include broadband cost, model-based support is based on a wireline network that is capable of providing standard DSL, and the rural support may be used to support DSL cable and fiber-to-the-home networks. Further, rate of return carriers are allowed to include broadband Internet access transport costs when developing HCL support levels.

³⁹ For example, model-based support establishes its “benchmark” at a point two standard deviations above the average reported residential rate in urban areas, with the data first aggregated by state. There is no consideration of special access revenue or DSL revenue.

⁴⁰ In addition, companies bundle these service elements in various ways. This makes it particularly difficult for any voice-only cost mechanism to estimate current voice rates, since large segments of the subscriber base do not pay the basic rate.

their interdependence. Under a total company approach, universal service support would not be affected by separations changes.

While there are potentially many benefits to a total company approach, there may also be drawbacks that would need to be considered or addressed. Even if federal support is calculated using a total company financial view, some states still need jurisdictional separations data to perform their own ratemaking work. States that engage in ratemaking for intrastate services will still use Part 36 (separations) to determine intrastate costs and revenues.⁴¹ If federal support is provided on a total company basis, it will no longer be automatically “tagged” for use by one jurisdiction. The only constraint is that support funds must be used for provisioning, maintaining, or enhancing any federally supported universal service. States would then need some method to allocate a portion of the federal support to be treated as intrastate revenue for ratemaking purposes.

Allocating support for each jurisdiction’s use will be complicated and may inevitably raise questions that can only be answered by using some form of separations rules. For example, a state might not be able to assert that 40% of federal support is intrastate if the supported company or the FCC asserts that 80% of that federal support has been assigned for other purposes.⁴² This problem will be particularly difficult if federal support is not sufficient to support fully both voice and broadband services.

The Universal Service Joint Board might leave this issue to be resolved by the Separations Joint Board or the FCC. Alternatively, the Universal Service Joint Board might want to offer guidance as to the portion of federal support that should be considered regulated intrastate revenue.⁴³

The interaction between regulated intrastate operations and a total company financial view for federal support could produce some unexpected results. For example, a carrier with low state earnings but high total company earnings would not be eligible for federal universal service support. This could lead a profitable carrier to seek an increase in its local and other state rates. If state law, federal law, or other regulatory constraints limit the state commission’s ability to allocate sufficient federal support to state services, then the state commission might have to allow a local rate increase. These problems will be fact-specific and will depend heavily on state and federal law.

A state may be able to address some of these concerns by excluding broadband and other nonregulated costs through a Part 64 type analysis. The Part 64 approach is likely to be

⁴¹ They will also use Part 64 to identify costs and revenues from non-regulated services.

⁴² One possible answer is that states may set intrastate rates based on the residual of total costs less total revenues and support. This option, however, creates a possibility that local rates might increase to compensate for broadband losses, a distinct possibility in the many states that have abandoned or curtailed regulation of local rates.

⁴³ For example, if federal support is calculated in part based on one or more rate benchmarks (such as a per-subscriber revenue estimate for local rates), the Joint Board might recommend that state commissions be permitted to use federal support to ensure that intrastate rates do not exceed those benchmarks.

controversial and problematic due to the fact that the FCC no longer requires carriers to exclude non-common carrier service costs as regulated costs for interstate ratemaking or federal universal service support. So long as the FCC has this policy for interstate ratemaking, it is difficult for states to assert their authority to exclude nonregulated costs under Part 64. Even if a state decided to use Part 64, there are no standardized procedures for a Part 64 exclusion, and companies will argue that making such an exclusion is burdensome.

V. Using Separations as a Tool for Universal Service Policy

The second broad approach available to the Joint Board is to continue to use the separations framework as a tool in managing intrastate rates, and possibly to extend it. The Universal Service Joint Board could endorse separations changes that identify broadband costs and move costs between the two regulated jurisdictions, thereby reducing rate pressure on fixed voice rates and promoting universal service. This second approach involves establishing new categories and factors that are relevant to the broadband world and to networks that provide multiple types of narrow band and broadband services.

A. Current Separations Issues

Separations should maintain a correspondence or balance between allocated costs and jurisdictional authority over revenues and services. Since 2000, however, a number of factors have compromised the relationship between separated cost assignments and the revenues generated by services actually provided over the network:

1. Separations factors have been frozen by the FCC since 2000.⁴⁴ Current separations factors fail to recognize the substantial growth in interstate traffic over that decade as well as several jurisdictional reclassifications during the same period. Although customers today make more interstate calls than ever, costs are still being assigned based on network usage in 2000.
2. For price cap companies and some rate-of-return companies, category relationships have also been frozen by the FCC since 2000. Current categories of investment thus fail to recognize the substantial growth in broadband and special access networks over that decade and the rapid growth of interstate special access revenues.
3. The separations regulations were developed over a decade ago assuming a switched circuit network structure. The rules do not reflect the current dominance of new technologies such as packet switching.

⁴⁴ CC Docket No. 80-286, Report and Order, FCC 01-162, (2001), released May 22, 2001.

4. AT&T, Qwest, and Verizon were granted forbearance from various cost assignment rules, including those related to jurisdictional separations.⁴⁵
5. The FCC's Wireline Broadband order has allowed ILECs to include certain non-common carrier broadband costs in regulated costs and the separations process, while excluding the parallel revenues.⁴⁶ As a result, ILECs are able to recover some broadband costs through local rates, access charges, the federal SLC, and universal service funding mechanisms.
6. The FCC does not require or allow companies to allocate common loop cost to DSL services.

It is important to note that state regulators currently have other tools to address at least some of these problems. State commissions can apply the Part 64 rules so that non-regulated costs are no longer assigned to the state jurisdiction, though this approach may be problematic for the reasons cited earlier. However, if a Part 64 approach was successful, a state regulator might be able to maintain reasonable rates without having to reach for non-regulated or interstate revenue.

B. Proposals from the State Members of the Separations Joint Board

The State Members of the Separations Joint Board have forwarded to the FCC a separations proposal designed to restore some of the lost balance between costs and revenues. The proposal has two parts, and each focuses on cable and wire facilities (C&WF):

- i) Broadband. Category 1 C&WF plant is Exchange Line C&WF. There are already three sub-categories under separations. The proposal would establish additional sub-categories within Category 1 C&WF. The new sub-categories are shown in Appendix A. Each new sub-category would have a new state/federal

⁴⁵ See WC Docket Nos. 07-21, 05-342, Memorandum Opinion and Order, 23 FCC Rcd 7302 (2008); WC Docket Nos. 08-190, 07-139, 07-204, 07-273, 07-21, Memorandum Opinion and Order and Notice of Proposed Rulemaking, 23 FCC Rcd 13647 (2008); and WC Docket Nos. 07-204, 07-273, Memorandum Opinion and Order, 23 FCC Rcd 18483 (2008).

⁴⁶ CC Docket Nos. 02-33, 01-337, 95-20, 98-10 and WC Docket Nos. 04-242, 05-271, Report and Order and Notice of Proposed Rulemaking, FCC 05-150, (2005). This order at paragraph 131 states:

“In this Order, we allow the non-common carrier provision of wireline broadband Internet access transmission that we previously have treated as regulated, interstate special access service, but we do not preemptively deregulate any service currently regulated by any state. Therefore, as specified in section 32.23 of our rules, the provision of this transmission is to be classified as a regulated activity under part 64 ‘until such time as the Commission decides otherwise.’ We do not ‘decide otherwise’ at this time because we find that the costs of changing the federal accounting classification of the costs underlying this transmission would outweigh any potential benefits and that section 254(k) of the Act does not mandate such a change.”

allocation factor that assigns more than 25% to interstate.⁴⁷ The additional investment and expenses for broadband would not be allocated to the interstate jurisdiction until the broadband service is sold, rather than when the investment takes place. The net effect would be to allocate gradually more loop plant investment to the interstate jurisdiction for facilities that support broadband, data, and video services.

- ii) Special Access. Special access investment amounts are determined by studies that measure the portions of C&WF plant that are used for special access circuits. For carriers with frozen categories (including all large price cap ILECs), these studies have not been done since 2000. This proposal would assign special access C&WF investment based on a new revenue allocator that reflects special access earnings. For carriers with substantial interstate revenues from special access, the net effect would be to allocate more loop plant investment to the interstate jurisdiction.

That state members' proposal remains under review by the entire Joint Board.⁴⁸ The current separations factor and category freeze is set to expire on June 30, 2011, absent action to extend the freeze.

C. Likely Effects of the Separations Reform Proposals

Each of the two proposed reforms would have material effects on universal service programs.

1. New Sub-Categories for Broadband

The new proposed sub-categories of investment would immediately affect two of the five existing USF programs, HCL and ICLS.

1. HCL. If the FCC does create new C&WF sub-categories for broadband, two key questions will be: (1) will the investment in the new sub-categories remain in category 1,⁴⁹ and (2) will the lines in the new sub-categories be reported as supported lines for HCL support?⁵⁰ Regardless of the outcome of these issues,

⁴⁷ The FCC could also determine that the additional allocation should be directed to information services.

⁴⁸ With some exceptions, the FCC is obligated to refer to the Separations Joint Board "any proceeding regarding the jurisdictional separations of common carrier property and expenses between interstate and intrastate operations" which the FCC institutes pursuant to a notice of proposed rulemaking. 47 U.S.C. § 410(c).

⁴⁹ The state members recommended that it be included in category one, but the FCC might include it in category 2 wideband services or establish a new category 5 for broadband.

⁵⁰ Even if the broadband lines are placed in Category 1, the FCC may decide that they are not supported under HCL, just as Category 1.1 and 1.2 lines are not supported.

companies are likely to have substantial changes in their HCL support, although the total amount of support is unlikely to change.

- a. The Universal Service Joint Board might want to reexamine the marginal support percentages that are hard-coded into the HCL support mechanism. Category 1 as defined by Separations rules should not include any “broadband” lines. If the new sub-categories of broadband investment remain in Category 1, each carrier’s HCL cost per line will remain unchanged, and therefore the national average cost per line will remain unchanged. Moreover, if lines in the new sub-categories continue to be counted as supported lines, then the current HCL support calculation will not change for any company. However, since the changes would reduce the amount of total loop cost assigned to the state jurisdiction below the current 75%, some carriers might recover more than 100% of their loop cost. That suggests a need to revise the HCL program parameters.
 - b. It may be appropriate to begin to provide broadband support at the time of or soon after making the separation changes. If the new sub-categories are not created within Category 1, then HCL support could decrease for some carriers and increase for others. Carriers with installed broadband facilities could see their support decrease, and they might have to raise rates to pay debt service. A new broadband program could assist with those broadband costs.
 - c. The changes could also spread HCL support to more carriers. The FCC might decide that *lines* in the new sub-categories will not be supported by HCL.⁵¹ In that case the separations change would reduce the amount of support per line for some companies. For individual carriers, the effects of the change would depend on the interaction between the capped and uncapped support calculation, and the extent of the carrier’s broadband and video deployment. The probable result is that more carriers would receive support, and the carriers with very high support levels and those that deployed broadband would receive less support.
2. LSS. The proposed separations changes would not have any effect on LSS. LSS is based on the COE Category 3 allocator and unseparated switching investment. Neither is affected by the separations proposals.
 3. Model-based Support. The proposed separations changes would not affect model-based support because its costs are unseparated estimates produced by a model. Nevertheless, model-based support is based on an assumed overall separations factor that is 24% interstate. The Joint Board might want to recommend reevaluation of this design factor that is currently hard-coded into the model support mechanism.

⁵¹ The same decision has already been made for special access lines (sub-categories 1.1 and 1.2).

4. ICLS. The proposed cost shift to interstate would increase the interstate revenue requirement. The FCC would probably allocate this new revenue requirement to the “common line basket.” This in turn would allow some carriers to increase SLC rates up to the current caps.⁵² Any revenue requirement not covered by SLC increases would be picked up by ICLS.⁵³ In the alternative, the FCC could allocate the new revenue requirement to DSL /broadband services, which would appear to be the intent of the state proposal.
5. IAS. The proposed category changes would likely have no effect on IAS. The FCC’s price cap system would likely consider the separations changes to be an exogenous change. Following an exogenous change, price-cap ILECs could increase both residential and business SLCs to the SLC caps, if they are not already at those levels. IAS probably would not be affected, however, because IAS support is based on past revenue differences and is not affected by separations cost changes.

2. Special Access Adjustment

The second proposed separations change would assign special access investment based on revenues. The immediate separations effects are as follows:

- Reduced intrastate investment in C&WF Category 1.3 Joint-use plant and local inter-office and toll trunks.
- Reduced intrastate revenue requirement associated with common loops.

The effects on rural carriers should be minimal because they do not provide a substantial amount of special access services, and the cost shift should be minimal. However, the large non-rural price cap carriers do rely heavily on interstate special access revenues, and they could see a major shift in investment and expenses allocated to the interstate jurisdiction. The foreseeable results of that shift are:

- Reduced local rates and any state SLC.
- Potential increases in interstate special access rates governed by price cap rules.⁵⁴ The FCC is currently investigating the reasonableness of special access rates. However, in many areas those rates are now set using pricing flexibility rules that

⁵² Most rate-of-return carriers already have SLC rates at the SLC cap level.

⁵³ If the FCC does not consider the new interstate costs to be part of the “common line basket,” neither SLC rates nor ICLS levels would be affected. Depending on FCC action, the additional interstate revenue requirement could possibly be recovered from DSL revenues (NECA DSL rates currently do not recover any loop costs, even though DSL requires use of the loop) or from other interstate or non-regulated services.

⁵⁴ This conclusion assumes that the shift in investment and expenses would be an exogenous change under the price cap rules.

are market-based and no longer depend on price-cap rules or separated costs. In pricing flexibility areas, a separations change presumably would not affect rates.

- Minimal effects on federal high-cost support. Rural company HCL and ICLS could be affected, but, because these companies generally have small special access revenues, the effects should be minimal.

3. The Net Effect on the Federal Subscriber Line Charge

For large price-cap non-rural carriers (such as the former Bell Operating Companies) the special access and Category 1 proposed separations changes have offsetting impacts on SLC rates. The use of higher interstate allocators for the new sub-categories could increase the interstate common line revenue requirement, which in turn would increase the SLCs. On the other hand, the shift of investment into special access plant categories (such as C&WF Category 2) would reduce the common line revenue requirement and therefore reduce the SLC rates. For the price cap companies, it is currently not known which impact would be greater. The results would vary by company.

D. Separations-Supported Reforms

As mentioned above, the Universal Service Joint Board might want to continue to use separations in one form or another as a tool to estimate support levels and promote intrastate rate affordability. The members could endorse the preceding separations changes proposed by the State Members of the Separations Joint Board because the changes improve the linkage between revenue and cost across the jurisdictions, but mainly because they would reduce intrastate costs, thereby facilitating lower local rates for voice service.

That proposal would direct additional investment and expense to the interstate jurisdiction. Once those costs are within the interstate jurisdiction, the Universal Service Joint Board should determine the portion of those costs that should be supported by universal service funds and the portion of those costs that should be recovered from end-users.

In addition, the Universal Service Joint Board could take the following steps that would extend the Separations Joint Board state members' proposal to cover broadband platforms:

1. Recommend that other categories be established for plant used for broadband purposes. For example, categories of transport investment and expense could be established related to middle mile services. Universal service support for such middle mile services would allow remote rural carriers to connect to Internet backbone carriers at a cost that is comparable to the connection costs of non-rural carriers.
2. Recommend shifting broadband C&WF costs sooner than the Separations Joint Board proposed. As described above, the State Members of the Separations Joint Board proposed allocating more cost to interstate, and some of those costs will be passed to the ICLS program. The state members proposed that the additional investment and expenses be reallocated when customers begin subscribing to broadband service. The Separations Members viewed that policy as desirable

because, while many rural carriers offer DSL to 90% of their customers, they sell to only 30%. The current proposal therefore allows voice to continue subsidizing unsubscribed broadband capable lines. If there is going to be a broadband support mechanism, however, it might be desirable to allocate investment and expenses to the interstate jurisdiction immediately following the investment.

3. Ensure that states receive guidance on how much support is “tagged” to benefit the intrastate jurisdiction. As described above, for example, HCL support benefits the intrastate jurisdiction through an expense transfer. Likewise, IAS is considered only interstate revenue. Similar mechanisms could be used in connection with new support mechanisms.

VI. Summary

Separations rules have had and still have a profound impact on universal service. In the past, separations rules were themselves the sole vehicle for achieving universal service goals. That method is no longer used, but many current universal service programs still operate using separations as a foundation for support calculations, and the support programs all “tag” support for use in one jurisdiction or the other.

The fundamental question addressed here is whether and how separations should affect the calculation of federal universal service support amounts and guide how support funds are used. One option for future support design is to take a “total company financial view.” This approach minimizes separations inputs and focuses on the overall financial operations of supported companies.

A second option is to advance universal service goals through separations changes. This can involve supporting and elaborating on the interim adjustments proposed by the State Members of the Separations Joint Board that were aimed at recognizing the increasing importance of broadband and special access services. It can also involve taking further steps along similar lines that would serve over a longer term.

APPENDIX

New C&WF Categories Proposed by State Members of Separations Joint Board

Interim Proposal- C&WF

C&WF Sub-category	Service provided	State Allocation Factor	Interstate Jurisdiction and/or Information Service Allocation
1.1	State private lines and state WATS lines	100%	0%
1.2	Interstate private lines and interstate WATS lines	0%	100%
1.3	Subscriber or common lines-VOICE ONLY	75%	25%
1.4 (new)	Voice and data	50%	50%
1.5 (new)	Voice and video	30%	70%
1.6 (new)	Voice, data, and video	10%	90%
1.7 (new)	Data and/or video, but no voice	0%	100%
1.8 (new)	UNEs and similar sales	NA	Unallocated