



June 24, 2013

Marlene H. Dortch, Secretary
Federal Communications Commission
Office of the Secretary
445 12th Street, SW
Washington, DC 20554

In the Matter of: E-rate Reform, CC Docket 02-6

Dear Secretary Dortch,

On June 18, 2013, the State E-rate Coordinators' Alliance (SECA) submitted the attached White Paper to Lisa Hone, James Bachtell, and Regina Brown of the Wireline Competition Bureau, and Michael Steffen, Director of Digital Learning, outlining our recommendations for E-rate reform.

Respectfully submitted,

A handwritten signature in black ink that reads "Gary Rawson". The signature is written in a cursive style with a large initial "G".

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EXECUTIVE SUMMARY OF SECA'S E-RATE REFORM 2.0 RECOMMENDATIONS

1. More E-rate funding is needed on a sustained basis. The universal service statutory requirements have not been met due to the chronic funding shortfall in the program.
2. The core mission of the E-rate program must be updated to reflect 21st Century Technology Needs of Schools and Libraries.

A. Priority 1 Service Eligibility should be revised to focus on high speed broadband data circuits and Internet access service.

- i. Over a five year period, the eligibility of basic phone service should be phased out.
- ii. Webhosting service should no longer be eligible.

While some stakeholders may advocate that no eligible service changes should be made, and we should focus all efforts on increasing funding, we believe addressing the program's chronic underfunding will take both a change in the eligible services and an increase in the funding.

B. Priority 2 Internal Connections eligible equipment and services should be revised to include:

- i. One Router per Building: to facilitate the access to the building for Internet Access.
- ii. Switches & Wireless Access Point (Layer 3 - POE): These devices would facilitate the access to the Internet for local cabling that does not exceed three cabling drops per classroom –and a prescribed number of drops for libraries. There should be no more than one Wireless Access Point per classroom. Multiple WAPs as may be needed for school library/media centers and inside libraries should be allowed. One UPS per switch should be eligible (with an uptime of no more than 30 minutes per switch).
- iii. Cabling: Cabling to the classroom (no more than 3 cabling drops per classroom) to provide a means of accessing the Internet, with no more than one Wireless Access Point per Classroom. All the cabling components need to be RCDD-BICSI compliant, that is, racks, wire managers, for the three cabling drops.

Basic maintenance should no longer be eligible.

- C. The maximum discount for Priority 2 funding should be revised to be 70%. Applicants with the highest NSLP percentage eligibility would be funded first in each discount band.
- D. All applicants should be scheduled on a rotating basis to apply for Priority 2 funding.
- E. District discounts should be calculated on the basis of the district-wide average, and not by building and not by using a weighted average. This will greatly simplify the process for applicants to submit form 471 applications, especially for larger districts and consortia, and will simplify the processing of applications.
- F. The Form 486 application should be streamlined.
- G. A unified Customer Access Portal Platform is needed to more efficiently administer E-rate.
- H. Program effectiveness should be measured based on the accessibility and affordability of telecommunications and Internet Access service rather than based on a specific measure that may become outdated over time.



SECA'S RECOMMENDATIONS FOR E-RATE REFORM 2.0 June 18, 2013

I. Introduction

The State E-rate Coordinators Alliance (SECA) is pleased to provide this white paper setting forth our recommendations for reforming the E-rate Program. We applaud the FCC for its efforts to sustain the success of the program, and offer our continuing support to help streamline the program and mitigate program waste, fraud, and abuse. This White Paper proposes reform topics that SECA encourages the FCC to include in any forthcoming Further Notice of Proposed Rule Making (NPRM) for the E-rate 2.0.

The fundamental framework has served the E-rate program well since its inception in 1997. Its structure was novel at the time, grounded in a competitive bidding model and discounts on services rather than a traditional grant program where the beneficiary receives a payment based on an application and then must report on the use of the funds after the fact. Given its originality, constant questions and issues required the framework to be fortified with procedural and substantive clarifications all of which has transpired over the last 17 years to bring us to the current day structure that has a robust track record of successfully deploying technology to the nation's schools and libraries. Yet all of the requisite procedural and substantive clarifications have also resulted in a program that many applicants find complex and frustrating.

Along the path of the last 17 years the program has resolved successfully each challenge that threatened its long term sustainability. The original concept of a self-certifying application quickly yielded to the birth of the Program Integrity Assurance (PIA) pre-funding review process. Before any funds were disbursed, auditors certified that the internal program controls were sufficient to ensure responsible oversight and disbursement of program dollars. The extent of the administrator's authority – originally contemplated as being completely independent from the FCC – was redefined so that all policy making responsibility was confirmed to rest with the FCC. Concerns about misuse of program resources led to criminal investigations and prosecutions, and lessons learned were incorporated into the oversight of the program recipients.

The fundamental requirements are well established for applicants and service providers: the applicant must be eligible, the services for which discounts are provided must be eligible and the discounts must be computed accurately. These three pillars are the statutory cornerstones of the program. One other fundamental precept that has served the program so well is the principle that an individualized approach that allows applicants to identify the services and equipment they need is imperative to the success of the program.

Discussion about the need to reform and overhaul E-rate in recent months culminated on June 6, 2013 with the President's announcement about the Connect ED initiative to increase broadband access and wireless connectivity to all schools and libraries in the next five years to the goal of 1 Gbps to each location. Global competitiveness, economic advantage, workforce readiness and online testing of the Common Core standards and other state standards have converged to create the impetus for E-rate 2.0. This goal requires the deployment of additional transmission capability to the doorstep of the school and library as well as adequate infrastructure within the walls of each building in order to be able to transmit

the bandwidth to each end user. In other words, as the law directs,¹ the internal connections component is just as important as the circuit speed connectivity delivered to the school. If the school or library's internal connections are not able to transmit the higher bandwidth service to each end user, the President's goal will not be achieved.

Likewise, in March 2013, Senator Rockefeller challenged the FCC², that "...by the end of this decade, I believe that every school in America should have 1 Gigabit of connectivity"—a goal that as May, 2013 approximately 1% of the schools in the nation currently achieve. Commissioner Rosenworcel, at the Washington Education Technology Summit³ in April 2013 agreed with that assessment, adding an interim step of 100 mbps per 1000 students by 2015.

Any discussion about E-rate 2.0 must address the chronic funding shortfall. E-rate is a victim of its own success in that year in and year out, the program is oversubscribed—often by a factor of more than two to one. Commissioner Jessica Rosenworcel highlighted this problem in her March 12, 2013 testimony before United States Senate Committee on Commerce, Science and Transportation:

We also need to update the E-Rate program to meet 21st century education needs. ... *But year-in and year-out, the demand for this program is double the amount the Commission makes available.* Moreover, our surveys suggest that 80 percent of schools and libraries believe their broadband connections do not meet the current needs. So I believe it is time for E-Rate 2.0. I think it is time to reboot, reinvest, and reinvigorate this program and put it on a course to provide higher speeds and greater opportunities in the days ahead.⁴

SECA's reform recommendations are informed by a set of core beliefs:

1. Additional funding is needed to keep pace with the increasing demand for Priority 1 and Priority 2 requests over time.
2. Educational efforts to provide students with anytime/anywhere access to advanced telecommunications services and information services are important. Further, reaching this goal will be best accomplished by leveraging other USF programs and not solely through E-rate funds.
3. The E-rate program should refine the focus of the eligible services to emphasize providing students, educators, and library patrons with access to current and converging advance telecommunications services, in particular Internet and broadband services.
4. All applicants must be able to obtain E-rate for Priority 1 and Priority 2 services/equipment on a fair and equitable basis.
5. The costs of E-rate eligible services, especially bandwidth for Internet, vary greatly from one location to another and from one provider to another. In other words, the same 100 mbps circuit may cost \$4,500 per month in one location whereas it may only cost \$300 mbps in another location. A block grant, per student or per location allocation does not take this variation in account sufficiently. A block grant approach to providing funding to applicants, therefore, is ill-advised. We believe E-rate has been more successful than block grant programs in large part because it uses an approach to funding which is targeted and focused very clearly on providing universal access based on individual applicant needs. Also, one of the benefits of the E-rate

¹The Telecommunications Act of 1996 directs the Commission to enhance "access to advanced telecommunications and information services for all public and non-profit elementary and secondary school *classrooms*, health care providers, and libraries." 47 U.S.C. § 254(h)(2)(Emphasis added)

² http://www.commerce.senate.gov/public/index.cfm?p=Hearings&ContentRecord_id=18f83ea5-3d7d-4ef9-92ad-30a3421c11d3&ContentType_id=14f995b9-dfa5-407a-9d35-56cc7152a7ed&Group_id=b06c39af-e033-4cba-9221-de668ca1978a

³ http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db0411/DOC-320122A1.pdf

⁴ http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-319445A1.docx (emphasis added).

program is that the support is allocated on the basis of actual costs that are determined after a competitive procurement. These costs vary from state to state, by contract, by provider and by location.

II. Additional Sustainable Funding is Needed

The crux of any reform and improvement of the E-rate program is ensuring there is a sufficient and predictable funding source to meet the needs of the nation’s schools and libraries. The universal service statute prescribes that there should be affordable access to and use of the services pursuant to 47 U.S.C. §254(c)(3), and also funding must be specific, sufficient and predictable under 47 U.S.C. §254(b)(5). These requirements have not been met year after year when demand has exceeded available funding.

The E-rate program has the dubious distinction of being the only universal service mechanism that has been underfunded since its inception. When the new support programs were established following the 1996 Telecommunications Act, E-rate and Rural Health Care were the only two programs to be capped. Unlike E-rate, Rural Health Care has never exceeded its cap while E-rate funding has been insufficient, year after year. The E-rate program simply cannot meet its statutory objectives without infusing the program with additional funding.

In April 2013, USAC released the demand estimate indicating that there were \$4.986 billion in funding requests for the \$2.38 billion available in annual funding. Of the requested amounts, \$ 2.7 billion were for Priority 1 services alone. Funding Year 2013 is the first year that undisbursed funds from prior program years need to be carried forward in order to fulfill Priority 1 requests. Even after the \$450 million of carry-forward funds approved for FY 2013, a deficit of more than \$1.3 billion stands in the way of funding Priority 2 requests submitted by the Nation’s most impoverished schools and libraries with a 90% E-Rate discount.

With the recently announced goal of deploying 1 Gbps connectivity to 99% of the schools and libraries within the next five years, more upward pressure will be experienced on the fund. The question is often asked, “Well, how much more money does the E-Rate Program need to fully meet the connectivity and infrastructure needs of our Nation’s schools and libraries?” One would think that the answer would be fairly apparent if we were to look back at “Demand versus Availability of Funds” over the last 15 years of the program. This historical shortfall, however, does not accurately capture the full extent of the deficit because experienced applicants understand the futility of applying for Priority 2 funding unless they have a relatively high discount. Since the E-Rate program’s inception in 1998, the annual funding cap has grown by approximately 6% while demand has grown by more than 150%.⁵ Demand for FY 2012 was \$3 billion more than the annual cap.

Many applicants with E-Rate discounts less than 80% no longer bother to request Priority 2 because available funding has traditionally run out after the higher discount bands of applications (80% - 90%) have been funded. Applicants with a discount percentage less than 80% have been funded in the Priority 2 category only five times in the last 15 years and only twice in the last 10 years.

FY	P2 Discount Threshold	Comments
1998	70%	
1999	20%	
2000	82%	
2001	86%	
2002	81%	
2003	70%	Including \$420M roll-over
2004	81%	
2005	80%	
2006	86%	

⁵ Since 2011, the annual cap has been adjusted for inflation, from \$2.25 billion to \$2.38 billion. The increase of \$130 million represents a 5.7% increase. The lowest annual demand occurred in the first year, which was \$2.03 billion. In recent years the highest annual demand occurred in FY 2012, which was \$5.24 billion, or an increase of \$3.2 billion or a more than 150% increase.

2007	81%	Including \$650M roll-over
2008	86%	Including \$600M roll-over
2009	77%	Including \$900M roll-over
2010	20%	Including \$1.15B est. roll-over
2011	88%	Including \$500M roll-over
2012	90%	Including \$1.05B roll-over
2013	uncertain	

The reality is that approximately eight (8) out of every ten (10) applicants receive \$0.00 dollars in Priority 2 funding. This funding has become increasingly more urgent in order to meet the goals and objectives set forth locally and by national initiatives such as The Partnership for Assessment of Readiness for College and Careers (“PARCC”)⁶ and the Smarter Balanced Assessment Consortium (“Smarter Balanced”)⁷. In simpler terms, these statistics demonstrate that a vast majority of applicants receive a 0% discount for their critical needs, while a very small percentage of applicants pay a nominal \$.10 to \$.20 for each dollar spent. SECA contends that this inequity needs to be addressed as part of any comprehensive reform of the E-Rate Program.⁸

Adequate Priority 2 funding is essential to ensure that the schools and libraries can update their infrastructure to accommodate the high speed 1 Gbps connections. Our recommendations discuss in more detail below that both infrastructure (Priority 2 equipment/service) and bandwidth (Priority 1 telecommunications and Internet access service) are needed to meet the current, emerging and future needs of America’s schools and libraries.

III. The Core Mission of E-rate Must Be Updated to reflect 21st Century Technology Needs of Schools and Libraries.

A. Introduction.

When E-rate first began in 1997, it was commonplace to access the Internet using a dial up modem connection over a voice phone line. According to a NCES report, 78% of the nation’s schools were connected to the Internet and 50% of the connected schools that were connected using dial up phone lines.⁹ A 1996 nationwide library survey showed that 44.6% had Internet access, many just via a

⁶ <http://www.parcconline.org/about-parcc>

⁷ <http://www.smarterbalanced.org/>

⁸ One relatively straightforward short term fix would be to adjust the funding cap to account for inflation since the program’s inception. Longer term solutions should include a comprehensive assessment of the true demand for funding and a “right size” adjustment to the cap, discount matrix modifications, streamlining Eligible Services to reflect current and future trends in the marketplace and completing contribution reform. In 2010, the FCC announced that the funds available for the E-rate program would be indexed for inflation on a “going forward” prospective basis that began with FY 2011. If the FCC were to retroactively index the fund to inflation since 1998, the current size of the fund would be \$3.155 billion, based on the CPI-U.

Year	Inflation Rate	Funding Available (Billions)
1998	Start	\$2.25
1999	2.7%	\$2.31
2000	3.4%	\$2.39
2001	1.6%	\$2.43
2002	2.4%	\$2.49
2003	1.9%	\$2.53
2004	3.3%	\$2.62
2005	3.4%	\$2.71
2006	2.5%	\$2.77
2007	4.1%	\$2.89
2008	.1%	\$2.89
2009	2.7%	\$2.97
2010	1.5%	\$3.01
2011	3%	\$3.10
2012	1.7%	\$3.155

⁹ <http://nces.ed.gov/pubs99/1999017.pdf>

dial-up connection.¹⁰ Many schools and libraries were just beginning to embrace and understand the long term implications of the digital age.

Since then great strides have been made to improve the connectivity speeds. While most organizations access the Internet through a direct (*i.e.*, broadband) connection in place of dial-up, the vast majority still view the current speeds as insufficient to meet the ever increasing demands for bandwidth. The FCC itself recognized this issue in its 2010 report which showed that almost 80% of all school and library respondents said their broadband connections did not always meet their needs.¹¹

In order for students and library patrons to obtain sufficient bandwidth, there are three vital infrastructure components that must be synchronized:

- The amount of Internet bandwidth leased from an Internet Service Provider (commonly referred to as Internet access service);
- Sufficient transmission capacity to deliver the Internet service to the school or library's hub location (commonly referred to as the Internet transport charge or telecommunications circuit charge); and,
- Sufficient transmission capacity inside the school or library building. The transmission capacity inside the building can be delivered via wired or wireless connections. If any one of these infrastructure components is inadequate, the bandwidth speed to the student or library patron will be diminished.

If any one of these infrastructure components is inadequate, the **bandwidth speed** to the student or library patron **will be diminished**.

Typically the first two components—Internet access and transmission circuits—are provided by service providers via a multi-year contract with the school or library. Leased high speed telecommunications circuits and Internet access commodity service are frequently purchased on a multi-year basis in order to obtain the most competitive prices possible. The prices for these services on a single year basis typically are exorbitant compared to a multi-year contract. These multi-year contracts minimize the pre-discount price which is beneficial to both the E-rate fund and to the end user school or library customer.

In contrast the wiring and/or wireless connections inside the school or library building are typically one time or periodic purchases of equipment or facilities. There is no need to purchase these components on an annual basis. When technology advances arise so that the equipment is capable of handling faster bandwidth or more efficiently transport the information to the classroom or library patron, it may make sense to then upgrade the equipment. Indeed the FCC recognized this distinction when it crafted the current 2-in-5 rule that allows E-rate applicants to purchase internal connections two out of every five years.

We believe that the Eligible Services List must be streamlined to focus exclusively on the Internet bandwidth, high speed data circuits and the equipment and connectivity inside buildings that are essential to deliver high speed bandwidth to students and library patrons.

We believe that the two tier priority system of funding appropriately differentiates between services which are typically purchased on a multi-year basis and internal connections equipment that are typically one time purchases. The Priority 1 classification for these contract services provides the best opportunity for applicants to be assured there will be adequate funding each year to pay for the E-rate discount portion of these contracts.

¹⁰ http://ipac.umd.edu/sites/default/files/publications/1996_plinternet.pdf

¹¹ http://transition.fcc.gov/010511_Eratereport.pdf

Given the historical oversubscription of the program, and the significant growth in Priority 1 requests which will continue to experience upward pressure in order to meet the 1 Gbps standard, there is little reason to believe that even if increased funding is made available, **all** requests for both Priority 1 and Priority 2 can be funded. The preservation of the two priority system will ensure that Priority 1 services will continue to be first in line for funding. We believe that the reforms to the scope of eligible services and equipment we are recommending below will reduce the incentive to try to redefine services and equipment as part of the Priority 1 category.

B. Eligible Services Reform

1. Priority 1 Reform

Priority 1 funding should focus on the transport of high speed data and Internet communications and should transition away from voice services and web hosting. While some stakeholders may advocate that no eligible service changes should be made, and we should focus all efforts on increasing funding, we believe addressing the program's chronic underfunding will take both a change in the eligible services and an increase in the funding. Thus in that we believe it is the best interests of the program, we offer this compromise on eligible services.

When E-rate first began, one of the primary ways to access the Internet was through voice telephone lines that were used for dial-up Internet access. There was no distinction made between voice and data telecommunications services because such a boundary in large measure did not exist. Many districts and library systems were not interconnected via a data communications network and each building obtained a direct connection to the Internet via a 56 kbps modem. Only through widespread deployment of faster speed technology was the distinction drawn between voice and data telecommunications services, and now this distinction has begun to converge through the deployment of VoIP services and technology, where voice services can be provided over the data communications platform.

Telecommunications services that are used only for voice communications should be phased out of E-rate support. These services are **not** used to provide advanced telecommunications or information services to schools or libraries. If a telecommunications service is used for both data and voice telecommunications services, the service should continue to be fully eligible for E-rate without requiring any cost allocation. This approach will incent applicants and service providers to migrate voice telecommunications services onto the data communications network platform wherever feasible and will encourage applicants to focus on augmenting their data network transmission capability to meet the anticipated needs for online testing in the near future.

SECA proposes a tiered phase out of up to five (5) years, to reduce and ultimately remove funding for all basic phone service by the end of the decade. This generally parallels the stated goals of the National Broadband Plan and the FCC's Connect America Fund. SECA's proposed plan allows the smaller and more rural applicants who disproportionately use the basic phone service and legacy technologies ample opportunity to upgrade their infrastructure, and for their associated service providers to also update their service offerings prior to losing their vital funding all together.¹²

Year One	80% of annual phone service would be funded at the applicant's E-Rate discount
Year Two	60% of annual phone service would be funded at the applicant's E-Rate discount
Year Three	40% of annual phone service would be funded at the applicant's E-Rate discount
Year Four	20% of annual phone service would be funded at the applicant's E-Rate discount
Year Five	No funding available for phone service

¹² Under this proposal, the bundling of end user equipment for any voice service – cellular, wireline or VOIP, would no longer be an issue because the associated service --- voice phone service – would no longer be eligible for E-rate.

Ultimately, SECA contends that a five-year phase-out of these legacy services will incentivize applicants and service providers to look for more cost-effective solutions. SECA further supports efforts to investigate options to move away from legacy systems like dedicated email servers and other expensive hardware currently funded as On-Premise Priority 1 equipment, and replace those with more cloud-based services that are generally more economical to maintain.

We understand that each school and library needs voice phone service and before E-rate began these institutions paid for this service out of their own budgets. We believe that the payment for voice phone service should return to being a local financial responsibility. This will allow more E-rate funding to be available for high speed Internet and data circuits.

The Internet access service category needs to adhere to the statutory goals of facilitating access (not content) to advanced telecommunications and information services. Webhosting services fail to meet this definition because webhosting is content based and does not provide access to advanced telecommunications and information services. Moreover, allowing webhosting to be eligible for support provides an incentive for E-rate applicants to outsource this service. If they provide the service in house, it is not eligible whereas if they outsource it the service is eligible. Applicants should be encouraged to continue providing this service from their own resources. Although school and library websites are valuable communications tools, these services do not fulfill the E-rate core mission of fostering access to advanced telecommunications and information services.

2. *Priority 2 Eligibility Reform*

When the E-rate program emerged in 1996-1997, its popularity was immediate and policy makers quickly realized that the allocated \$2.25 billion was insufficient to meet all funding requests. Before the second year of funding was committed, the first-come first-served rule was replaced with the present two priority system. Ever increasing demand for program resources has meant that only the highest discount applicants have been able to access any Priority 2 funding.¹³ Funding requests for Priority 1 services have reached an unprecedented level whereby it appears that in FY 2013, there will be insufficient dollars to fully fund *any* Priority 2 requests, even those at the highest discount level of 90%. While beginning in 2009, the annual allocation has been adjusted for inflation, these modest increases do not keep pace with demand, and the unmet need grows bigger each year.

The Priority 2 dilemma has plagued the program for years. Prior efforts such as the two-in-five rule and the narrowed scope of E-rate eligible Priority 2 maintenance services have not opened access to this funding source to more applicants.¹⁴ Particularly in recent years, Priority 2 funding has been available only to applicants with the highest discount FRNs of 88% or above, in 2011 and the maximum discount of 90% in FY 2012. In FY 2013, it appears there is not enough money to fully fund even the 90% FRNs.

While there are many interrelated factors driving up demand for Priority 2 funding, certainly one that cannot be ignored is the breadth of the Priority 2 Eligible Services List. We believe that the list needs to be redefined to focus on ensuring that the transmission of bandwidth inside the building is sufficient, and all other functionality should be no longer be eligible for support.

¹³ Well after the end of E-rate FY 2010, in the fall of 2011, the FCC decided to fund all Priority 2 funding requests by using unspent program resources and allocating all then available dollars to FY 2010. This unprecedented action was undertaken only by through the agency's waiver of its rules, and prompted a huge surge in FY 2012 and FY 2013 Priority 2 demand.

¹⁴ The lowest discount percentage funded in the history of the program has been 70% in FY 2003, with the exception of FY 2010 and FY 1999 when applicants at all discount levels were funded. FY 1999 was only the second year of the program and problems with the processing of the first year applications discouraged applicants from re-applying in the second year. FY 2010 was an aberration because the FCC used funds that would have otherwise been designated for carrying forward into FY 2011 to fund all discount levels. This decision was made after well after the FY 2010 application cycle had ended. Many applicants with lower discounts likely had not applied for Priority 2 funding in light of the fact that they believed it to be unlikely they would receive funding approval based on the FCC's then existing rules.

The spirit of E-rate is to enable access to online resources for 21st century learning. Recognizing the importance of educational technology many mainstream vendors have begun to offer free or low cost cloud storage resources to the K-12 and library market. Many applications that used to have to be housed on physical components located at the school or library now can be accessed virtually through cloud computing. Wireless communications have become as common, if not more commonplace, than going online with a wired connection. With the widespread expansion and availability of various laptops, tablets, and I-devices with built-in wireless, the need for tethered devices that are directly cabled to the building infrastructure is no longer needed.

The Priority 2 funding eligibility should focus solely on these components, including installation:

1. One Router per Building: to facilitate the access to the building for Internet Access.
2. Switches & Wireless Access Point (Layer 3 - POE): These devices would facilitate the access to the Internet for local cabling that does not exceed three cabling drops per classroom –and a prescribed number of drops for libraries. There should be no more than one Wireless Access Point per classroom. Multiple WAPs as may be needed for school library/media centers and inside libraries should be allowed. One UPS per switch should be eligible (with an uptime of no more than 30 minutes per switch).
3. Cabling: Cabling to the classroom (no more than 3 cabling drops per classroom) to provide a means of accessing the Internet, with no more than one Wireless Access Point per Classroom. All the cabling components need to be RCDD-BICSI compliant, that is, racks, wire managers, for the three cabling drops.

Initially, applicants may be concerned about these limitations and particularly concerned about the rescission of server eligibility. In light of the free or low cost cloud services that have been introduced in recent years, however, there are other viable alternatives that applicants are using today, and that other applicants that had purchased their own servers, etc. can migrate to these services over time.¹⁵

While many school districts will report that the elimination of basic maintenance will produce a hardship for them, in light of the large growing demand on priority 1, we need to consider all areas of E-rate eligibility for program improvement. Basic maintenance is something that can be eliminated to help support the overall goal of the program to ensure reliable internet access for online resources.

Typically basic maintenance is not approved until six months or later in the funding year. In all such cases applicants find the means to support their systems without this approval. Then when approval is received during the second half of the funding year, it is usually to catch up on hardware maintenance items for manufacturers. This type of basic maintenance is no longer needed given the purchasing options of most manufacturers providing a product line that has limited life time warranty, at no charge to the application. It means that any repairs, etc. must be sent off site to the manufacturer. This will not cause any service/network interruptions if the applicant has a spare unit in their district. (Typically the limited lifetime warranty hardware can be sent off and received back within 2 weeks.)

The on-site labor portion of basic maintenance is meant for just basic maintenance, i.e. operating system upgrades as needed, troubleshooting and repair of the network operations or server. These basic tasks are not needed on a day to day basis, but can be accomplished on a monthly or quarterly basis (unless there is an unexpected equipment failure). Given the fact that some applicants go almost the entire year before being funded, they must have other means to support these repairs and issues. It is also an area that is challenging to ensure that there is no waste in terms of vendor hours being billed, and actual work accomplished. With the limited funding, and the need to focus those funds to the P1 area, and in light of the limited P2 eligibility area, SECA supports the elimination of basic maintenance as an eligible service.

¹⁵ For example, free Yahoo email to education, other free file storage services such as Google Docs, Drop Box, etc..

C. Restructuring Rules of Access to Priority 2 Funding.

SECA believes that regardless of discount level, all applicants need to be able to obtain some periodic funding of Priority 2 requests, in order to ensure universal broadband connectivity for *all* schools and libraries. Three major reformative steps are needed:

1. The two-in-five rule needs to be rescinded.¹⁶
2. Reduction of the maximum discount for Priority 2 funding to 70%.
3. A more predictable approach that systematically allocates Priority 2 funding based on the applicant's NSLP entity-wide discount.

1. *Rescind the Two-In-Five Rule.*

The two-in-five rule unfortunately was unsuccessful in making Priority 2 funding available to more applicants. Since its enactment Priority 2 demand has continued to grow significantly. In combination with the increased demand for Priority 1 funding, all but the highest discount applicants chronically have been unable to receive Priority 2 funding approval. A different system for apportioning these funds needs to be considered.

2. *Reduce the Maximum P2 Discount to 70%.*

The discount matrix was established by the FCC in 1997 based entirely on circumstantial and anecdotal information. No evidentiary or experiential information could be consulted since E-rate was a new paradigm from a traditional grant system for dispensing educational technology funding. In setting the maximum discount at 90%, the FCC largely relied on the Joint Board's recommended discount matrix subject to minor tweaking.¹⁷ In its Recommended Decision, the Joint Board offered the following explanation of the discount matrix which noticeably is devoid of any rationale for the maximum discount of 90%:

We recommend that the Commission adopt a rule which provides support to schools and libraries through a percentage discount mechanism because we find that such a mechanism would establish incentives for efficiency and accountability. First, requiring schools and libraries to pay a share of the cost should lead them to avoid unnecessary and wasteful expenditures because they would be unlikely to devote their pre-existing budgeted funds to purchases that they could not use effectively. Second, a percentage discount encourages schools and libraries to seek the best pre-discount price and to make informed knowledgeable choices among their options, thereby building in effective fiscal constraints on the discount fund. In fact, we understand that state or school or library boards generally require schools and libraries to seek competitive bids for all procurements above a specified minimum level, and we would expect a percentage discount mechanism to initiate the competitive bid process.¹⁸

Given the inflation-adjusted \$2.25 billion annual cap, the maximum 90% discount for Priority 2 services and equipment makes it impossible, year after year, to meet the needs of lower discount applicants. The E-rate program fails, year after year, to meet the twin Congressional goals explicitly cited when the current discount matrix was established. First, the discounts must ensure affordable access to and use of the services pursuant to 47 U.S.C. §254(c)(3) and second, the E-rate mechanism must be

¹⁶ The FCC recognized the ineffectiveness of the two-in-five rule in the E-rate Broadband NPRM. The same schools continue to receive repeated funding while those schools and libraries that are also very poor do not receive funding. The two-in-five rule has made it nearly impossible for state consortia or state networks to purchase Priority 2 equipment for shared use by members.

¹⁷ Federal-State Joint Board on Universal Service, CC Docket No. 96-45, *First Report and Order* (released May 7, 1997) at ¶493.

¹⁸ Federal-State Joint Board on Universal Service, CC Docket No. 96-45, *Recommended Decision* (released November 8, 1996) at ¶ 549.

specific, sufficient and predictable support mechanism under 47 U.S.C. §254(b)(5). Lower discount applicants do not have sufficient funding in the absence of E-rate to achieve and keep pace with broadband connectivity needs. Applicants never know ahead of time whether there will be sufficient funds for Priority 2 until after the application cycle is completed and a demand estimate is prepared. There is absolutely no predictability or certainty of the Priority 2 funding stream in the current system.

Even if the annual cap is increased, the current discount matrix is not sustainable. Many applicants have stopped applying for Priority 2 funding knowing that it was a futile gesture. Once the cap is increased, these applicants likely will apply for Priority 2 which will further increase demand.

The Priority 2 maximum discount should be lowered to 70% in order to allow more applicants to receive this funding. Many of the applicants whose discounts would decrease to 70% have historically been able to access Priority 2 funding and have experienced this benefit for the last sixteen years. It is time to allow others to have that experience. Requiring applicants to contribute more of the applicants' own funds will improve efficiency in the allocation of funds. Applicants will need to ensure that their purchases are needed and are as cost effective as possible. While applicants may prefer to retain the current maximum discount, the lower discount applicants feel equally strongly that they should have an opportunity to access Priority 2 funding. If lowering the maximum discounts means that lower discount applicants will be able to obtain Priority 2 funding, we are confident that they will support this recommendation.

In this proposal, the applicant (district, library, non-public or charter school) relies upon the percentage of NSLP-eligible students to directly calculate the Priority 2 discount. As can be seen below, the discount for an urban applicant is determined by adding a constant 20% to the percent of NSLP-eligible students, with a maximum E-rate discount of 70%.

For example, an urban applicant with 18% of students eligible for NSLP will receive a discount of 38% (18% NSLP eligible + 20% urban constant= 38% E-rate Priority 2 discount). The discount for a rural applicant is determined by adding a constant 25% to the percent of NSLP-eligible students, with a maximum E-rate discount of 70%. For example, a rural district with 27% of students eligible for NSLP will receive a discount of 52% (27% NSLP eligible+25% rural constant=52% E-rate Priority 2 discount).

NSLP %	URBAN DISCOUNT	RURAL DISCOUNT
	(NSLP% + 20%; max 70%)	(NSLP% + 25%; max 70%)
100%	70%	70%
99%	70%	70%
98%	70%	70%
∫		
49%	69%	70%
48%	68%	70%
∫		
44%	64%	69%
43%	63%	68%
42%	62%	67%
34%	54%	59%
33%	53%	58%
32%	52%	57%

∫		
24%	44%	49%
23%	43%	48%
22%	42%	47%
∫		
14%	34%	39%
13%	33%	38%
12%	32%	37%
∫		
0%	20%	25%

An alternative to the formulaic discount matrix that may also achieve greater distribution of Priority 2 funds is a simple more granular matrix that eliminates the rural/urban distinction and also limits discounts to 70%.

NSLP	P2 E-rate Discount %
<1-19%	10%
20%-29%	20%
30%-39%	30%
40%-49 %	40%
50%-59%	50%
60%-69%	60%
70%-100%	70%

3. *All Applicants Should Be Scheduled On A Rotating Basis To Apply For Priority 2 Funding.*

SECA additionally recommends that the FCC establish a process of funding “down” the discount levels until all applicants and discount levels are funded. While this process may take several years until all applicants and discount levels are funded, it will ensure more predictability for all applicants and not just for extremely high discount applicants. For example, in the first year of implementation, applicants with NSLP eligible percentages of 100% are funded first, 99% are funded second, and so forth until all available Priority 2 funds are committed in year 1. In year 2, the next lower NSLP eligible percentages are funded, so that if year 1 funding stops at 92% NSLP eligible, then year 2 will start funding at the 91% NSLP eligible and proceeding down the NSLP levels until all available priority 2 funds are expended.

Possible funding allocation:

NSLP	Urban %	Rural %
100%	70%	70%
99%	70%	70%
98%	70%	70%
97%	70%	70%
96%	70%	70%
95%	70%	70%
94%	70%	70%
93%	70%	70%
92%	70%	70%
91%	70%	70%
90%	70%	70%

Key: Blue=year 1 funding availability
Pink=year 2 funding availability

An applicant's discount level for Priority 2 funding would be based on the shared discount of the district, library system or consortia and not based on each individual building's discount. This approach will reduce any attempts to manipulate discount calculations to try to achieve a higher discount for a group of buildings and recognizes the reality that budgets are administered at the district or library system level and not at the individual building level.

The applicant's baseline discount would be established in the first year of a rolling funding cycle and would remain constant until the funding cycle for all discount levels was completed. The constant discount is needed in order to avoid fluctuations that would alter the applicant's place in line for Priority 2 funding. For example, if an applicant with an 80% discount in Year 1 has a different NSLP percentage that results in a 90% discount in Year 2, but in Year 1, Priority 2 funding was allocated to all applicants with a 90% discount, the applicant could conceivably be unable to obtain Priority 2 discounts in Year 2. Conversely, if an applicant with a 90% discount in Year 1 has a different NSLP eligibility that results in an 80% discount in Year 2, and the applicant already received Priority 2 funding in Year 1 (because the applicant had a 90% discount in Year 1), the applicant should not be eligible to receive Priority 2 funding in Year 2. Once an applicant is funded in the Priority 2 cycle, the applicant cannot receive Priority 2 funding again, until all other applicants have had their turn at Priority 2 funding.

In order to effectively budget and plan, applicants will be allowed two years to purchase and install Priority 2 equipment.¹⁹ With use of the already-established service delivery deadline extension process, an applicant may request additional time beyond two years to complete their Priority 2 projects.

Under this approach, consortia applicants will have two options for filing for Priority 2 services and equipment depending on whether the procurement is for shared equipment that will be used by all consortium members, or whether the equipment will be installed at the premises of a consortium member for that member's use.²⁰

A consortium member such as a school district may file for some Priority 2 equipment as an individual district while also being part of a consortium application for different Priority 2 equipment that will be installed and used by the individual consortium member. In order to avoid applicants from double dipping from Priority 2 funds (applying as a district and also being a member of a consortium application for the same eligible equipment), PIA will need to confirm that the eligible equipment being requested by the consortium is not the same as equipment being purchased by the individual districts. This is the same situation that currently exists whenever a consortium member files a separate Priority 2 application and the consortium of which the member is a part also files a Priority 2 application.

For the equipment that the consortium lead is procuring on behalf of the consortium member and which will be installed at the premises of the consortium member, the consortium lead will complete a consortium Block 4 worksheet for all members with the same discount rate. The Administrator will verify that there is no duplication of service between the consortium application and member application. For example, if the projected Priority 2 discount eligibility for a given year will be applicants between 70% and 65%, the consortium lead will complete a Priority 2 form 471 and complete a Block 4 worksheet for each group of members at each of the projected eligible funding bands. The consortium lead will also

¹⁹ The use of the phrase "equipment" is intended to cover all Priority 2 funding requests except for basic maintenance of internal connections.

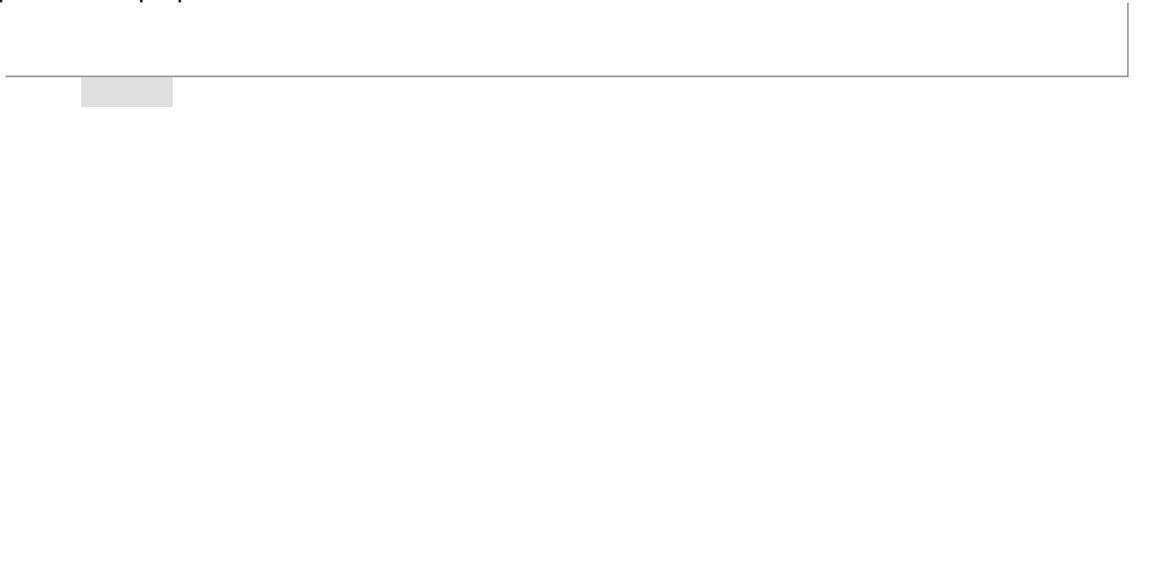
²⁰ SECA is uniquely positioned to discuss Consortia issues as most States use some sort of consortia model to provide statewide networks and/or regional networks. Numerous SECA members file consortia applications on behalf of their state networks and/or work closely with consortia applicants. Many consortia applications file for backbone circuit connections and/or Internet bandwidth, while the district and library members of those consortia are responsible for filing their own applications for either the connection to the backbone network and/or for building to building connections. Consortia applications result in a reduced number of FRNs being filed each year but may not result in fewer overall applications being filed. This is because the consortia applications typically file for different services (that is, circuit connections or Internet bandwidth) compared to the services (circuit connections) listed on district or library applications.

complete a Block 5 funding request worksheet for the equipment to be installed at each member location within the bands. Each Block 5 will reference the corresponding Block 4 worksheet, similar to current policy.

Consortium leads may also file for Priority 2 funding for equipment that will be shared and used by all members of the consortium. These applications must utilize the simple average of all of the consortium members' simple average discounts, and must be filed in the year in which the consortium's average discount is eligible for Priority 2 funding. The consortium's Block 4 worksheet will include the simple average discount of each consortium member.

Just to be altogether clear, SECA's recommendations for modifying the discount matrix for Priority 2 funding would not apply to Priority 1 funding. The current discount matrix would continue to apply for Priority 1. The current Priority 1 matrix allows applicants a predictable funding allocation and avoids potential applicant "shock" that could result from drastic changes to funding for services that may be covered by multi-year contracts and upon which a majority of schools and libraries currently depend.

The revised Block 4 for the form 471 application that reflects the revised Priority 2 funding, as well as incorporates the proposed revisions in Section IV.B. is:



C. District-Wide Discount Calculation for All Services

SECA recommends that the E-rate rules be amended to require school districts to calculate their E-rate discount using a district-wide simple average instead of using the current weighted average discount method. SECA first recommended this reform in its 2005 NPRM Initial Comments and the Commission included and supported the concept in its 2010 E-rate NPRM (FCC 10-83). After much

reflection, SECA believes that changing the manner in which districts calculate their E-rate discounts will not only simplify the program for applicants and USAC, but it should also be expanded for Priority 2 services.

1. *Alignment with Local Taxing Structures*

The current discount calculation rules were established to assign a discount for each service depending on which buildings are receiving that service. This method of discount calculation is based on the premise that a poor school building in a district needs a greater discount than the more wealthy buildings in that district because a poorer population could not pay as much for the services as the population of the families with more financial resources. The faulty assumption in this method of discount calculation is that individual school buildings have their own local taxing authority whereas in reality they do not and they do not have a budget that is legally separate from the district's budget. Tax bases are calculated on an entire district population, not just those of a subset of schools. School districts are the administrative authorities over all of their schools. The revised district-wide discount formula is based on a districts actual accounting practices and organizational structure.

2. *Application Simplification*

Besides providing greater equity based on actual local taxing structures, this proposal would greatly simplify the Form 471 Block 4 for applicants to complete. Currently, a district calculates its discount in no less than seven (7) steps. Under the proposed district-wide simple average discount calculation, a district would only need to complete two (2) steps to calculate the district discount rate for shared services – calculating the percentage of students in the entire district that are eligible for the NSLP and identifying the straight matrix discount. The discount would remain the same for all Priority 1 and Priority 2 services, regardless of the individual entities within the district that are receiving the service at the time the Form 471 is filed. Should the Commission choose to continue with the rural/urban designation which adds a 5% or 10% discount for rural school buildings in certain NSLP eligibility bands, SECA proposes that the rural/urban factor be factored in district-wide based on the location of the district's central office facility – in other words, the building in which the school district superintendent's office is located.

3. *Simplification of NIF Procedures*

In addition, the simplification proposal resolves another complexity that has arisen as a result of the Commission's well-intentioned and much-needed broadening of the definition of educational purposes. In the Second Report and Order in CC Docket No. 02-6, FCC 03-101 (Order Released April 30, 2003), the FCC clarified the definition of Educational Purpose as follows:

[A]ctivities that are integral, immediate, and proximate to the education of students, or in the case of libraries, integral, immediate, and proximate to the provision of library services to library patrons, qualify as "educational purposes."

This clarification enabled Priority 1 funding to be made available, in addition to school buildings with classrooms, to other buildings within the District in which activities with an educational purpose were conducted. In the course of implementing the FCC's educational purpose definition, the Universal Service Administrator created a new classification of entities called Non-Instructional Facilities ("NIFs") and required applicants to obtain an entity number for certain NIF facilities, and to list those facilities on the Block 4. Determining which NIF buildings require entity numbers and listing on the Block 4 is complex. If the NIF is located on the same campus as a school building with classrooms, the NIF does not require a separate entity number if the NIF only provides services to the adjacent school building. If, however, the NIF provides services to other school buildings located on a different campus in addition to providing services to the school building that is located next to the NIF, the NIF *does* require a separate entity number. This is just one example of how an applicant can become inadvertently entangled with the E-rate program requirements and may unwittingly commit an infraction of the program requirements.

There is yet another layer of NIF complexity – NIFs with classrooms. Under USAC procedures, if a NIF building contains one single classroom – even a classroom that is only used for a few days per year or a classroom that is used to conduct training to different students every day or every week – the district is required to provide a building discount for that NIF, based on that single classroom, using a ‘snapshot’ of students on a single day. State E-rate Coordinators have repeatedly pointed out to the Administrator that a NIF with classrooms is not a school and students in NIFs with classrooms are essentially being counted twice in the district’s E-rate discount calculations. This procedure actually provides an incentive for districts to game the system, so to speak, and to assign the highest discount to the NIF because there is nothing to prevent districts from using as its ‘snapshot day’ when the profile of students receiving instruction in the building is the poorest group of students.

Clearly, the flexibility that the Commission was attempting to provide in the Second Order has been exacerbated with the imposition of more, rather than less administrative burden on applicants. Fortunately, this flexibility can be restored with the adoption of the shared discount simplification proposal. Because districts would no longer be required to separately identify each NIF, the additional NIF certifications that have been imposed on applicants would no longer be necessary. Instead, applicants would be required to certify that shared services will be provided only to eligible schools and eligible non-instructional facilities as part of the Block 6 Certifications on FCC Form 471. This is a simple and elegant solution to what is now a complex issue.

4. *Additional Benefits*

The proposed discount calculation for shared services is dramatically simpler than the current methodology. Applicants’ ease of calculation and better alignment to a district’s taxing authority, however, are only two benefits. By adopting the full Block 4 streamlining approach, several current operational problems would be solved or vastly improved:

- *Post-Form 471 Submission Block 4 Changes:* Because no such mechanism exists to inform the SLD that a new school has opened or is now receiving the discounted service, this has posed a problem to affected applicants because: 1) invoices are paid only for service provided to entities listed on Block 4 of the original Form 471, and 2) in audits and site visits, the applicant must be able to show that discounts were provided only to the entities listed on Block 4 associated with the FRN. In recent years, USAC has become overly concerned about school closings both during PIA review and post-commitment. In fact, most states and consortia applications are held until the end of PIA reviews because PIA must track down every rumor of a school building closing that is directly or indirectly listed on a Block 4. This concern would be ameliorated by assuming that the billed entity has a shared discount based on all schools in the district.
- *Elimination of the 2/5 Rule:* The 2/5 rule was developed with great intentions, but never it never achieved the intended results of opening up access to Priority 2 funding to applicants with relatively lower discounts, did not align with district technology plans because of the lack of predictability of Priority 2 funding commitments, and was not operationally workable with centrally-located network operations equipment. Furthermore, it is quite easy to manipulate with the ability to easily obtain new entity numbers (and thus a new two years) with ever-changing school names and shifting school populations. By adopting the full Block 4 streamlining proposal, the need for 2/5 limitations would be eliminated because Priority 2 funding would be administered at the district, not building, level.
- *Equipment Moves:* Equipment moves between schools would be permitted based on a school district’s needs and would no longer be prohibited based on the fact that a certain high-discount percentage building received equipment and therefore was required to keep it located in that building for at least three years. The equipment disposal rule

would remain, whereby schools could not dispose of E-rate funded equipment for at least five years from its installation date.

- *Speed of PIA Application Review:* PIA staff would not be required to verify every single school's enrollment and NSLP eligibility figures, but rather would simply look at the total enrollment for the district and the total NSLP eligibility. This simplification alone could save days or weeks when reviewing a single district's application especially for larger districts.

Should the FCC believe that building name data is needed, Block 4 should be modified to list buildings believed to be receiving services on July 1, with no individual building enrollment and NSLP data identified. However, there should be clear and direct written guidance given to the Administrator that those buildings may change throughout the funding year and that the applicant cannot be penalized should a building be added or removed from receiving eligible services. With the modification to the way applicants calculate discounts, there is no way for an applicant to manipulate the manner in which it applies for discounts based on subsets of high discount schools, and therefore an applicant cannot receive more funding than to which it is entitled.

For Priority 2 applicants, relying on the simple average discount of the district would effectively leave control of equipment and wiring planning/expenditures with the school district, lending greater support to the more comprehensive planning, budgeting, and procurement processes at the shared/district level. Because the district would only have a matrix discount, the Priority 2 discount proposal is designed to work in conjunction with SECAs proposal to modify the way Priority 2 funding is disseminated, which is based on NSLP percentages, not by E-rate discount.

5. *Consortia Discount Calculations*

Under the current discount calculation methodology for consortia, they are required to first calculate the weighted average discount for each district within their consortium (the seven-step process for each district in the consortium as described above), and then compute the simple average of those weighted averages. Under the proposed district-wide discount reform proposal, consortia leads simply would be required to list the consortia member name and discount matrix discount, and then calculate the simple average of the discounts for all of its members. This approach will greatly simplify the process for consortia applicants thereby hopefully leading to an incentive to encourage more consortia filings.

Finally, the district-wide discount calculation method is not new ground. The same discount calculation methodology was implemented in 2003 for libraries consistent with the original intent of the FCC's rules.

D. Form 486 Should Be Streamlined.

The Form 486 has become an obstacle to applicants receiving the benefit of their approved E-rate funding. SECA recommends the following changes that will align the Form 486 with the other simplification methods contained in this document. The form is required to be submitted by 120 days from the issuance of the Funding Commitment Decisions Letter or 120 days from the service start date, whichever is later. If an applicant misses the deadline, funding is rescinded for every day that the form is late and can often lead to the rescission of the entire approved funding request. Applicants should be given the option to providing the information currently required on Form 486 as part of their completion of Form 471. Applicants who prefer to continue filing Form 486 should be given that option and a check box to designate this preference can be included on form 471.

To eliminate the current penalty of full rescission of funding for missing the form 486 procedural deadline, SECA recommends the following specific modifications:

1. *Certifications*

The form's current purpose is to provide the Schools and Libraries Division with a document where the applicant self certifies three (3) items; service start date, compliance with the Children's Internet Protection Act (CIPA) and the existence of an approved technology plan, if required. The Form also provides the name of the entity that approved the technology plan. Most of the certifications can be included or already appear on the Form 471. If an applicant so chooses, the certifications should be made available on the Form 471.

2. *Block 2: Early Filing Information and CIPA Waiver Requests*

6a. Early Filing: Applicants find this certification confusing and it appears to provide no additional information or value than what is required in Block 3 Item 7. This certification should be removed from the form.

6b. CIPA waiver should remain on the form in order to provide new applicants or applicants with new services to become compliant within the pre-described timeframe of the third year of requesting discounts. This certification should be moved from the current location on the form to the same location as the remaining certifications.

6c. CIPA Waiver for Libraries for funding year 2004: This certification is out-of-date and should be removed from the form.

3. *Block 3: Service Information*

In addition to the certifications, Item 7 requires the applicant list every FRN and the service start date for each. Due to ministerial and clerical errors, applicants with a large number of funding requests do not list all FRNs. When the FCDLs are delayed until the following calendar year (as with many state and large consortium applications) it is easy for the applicant to enter the wrong funding year in the service start date. The administrator's system can be modified (or the portal configured) to pre-populate all the funding requests related to a Form 471 with the entering of the application number in item 1 (A) 471 Application # from FCDL. The service start date Listed in the Form 471, Block 5, Item 19a can be used to pre-populate the service start date for monthly recurring service (telecommunications, internet access and internal connections basic maintenance). The applicant must have the ability to modify the information if for any reason the pre-populated information has changed.

4. *Block 4: Certifications*

The CIPA and technology plan certifications can be included in Form 471.

E. A Unified Customer Portal Access Platform Is Needed to More Efficiently Administer E-rate.

When E-rate first began in 1997, almost a generation ago, the technology for online processing of applications was primitive compared to the sophisticated systems now ubiquitously implemented for online transactions. In the intervening 15 years, additional online functionality has been introduced for E-rate stakeholders but the systems are segmented, fractured, non-intuitive, difficult to navigate and prone to crashing. USAC is to be commended for its recent request for input concerning E-rate systems' redesign. SECA strongly believes there is a need for advanced data management systems in order to improve the overall efficiency of the program. The SECA vision of an improved E-rate program includes improved system functionality that provides applicants with the online tools and access to data necessary to participate effectively and efficiently in the program.

SECA envisions a virtually paperless E-rate application process where all current functions would be conducted online via the E-rate Portal, comparable to a commercial online banking or other online

accounting system.²¹ We believe that the cost of deploying a paperless E-rate process will quickly be offset with the savings that will be achieved from greatly reducing the time and personnel costs associated with the current manner of processing forms and certifications. There remain many paper processes that need to be fully automated and integrated into the data processing system; for example, there are still far too many certifications, Item 21 attachments, SPIN changes, service substitution requests, and invoice deadline extension requests, submitted on paper, fax or email.

A portal solution will provide aggregate information from a number of different sources, including disparate systems to authorized users in a managed single screen or system. This solution will give the applicant the ability to submit required information, retain and recall historical information that can be changed and modified throughout the life of the program. Likewise, the same interface should be accessible to the Administrator's personnel thereby enabling their review to be far more streamlined since all of the history of the applicant's request will be readily available.

The portal solution also will eliminate layers of bureaucracy, avoid duplication of effort, root out unnecessary complexity, and make the system more responsive and customer focused.

A portal solution will give applicants the ability to:

- Access all information submitted to the Universal Service Administrative Company. The applicant should have the ability to check the status of all forms and post-commitment requests.
- Review all submissions and check the status of pending processes.
- Manage all information submitted to the E-rate program. Applicants should have the ability to update school information at any time during the funding year. All forms should be viewable, editable, and re-creatable.
- Access a centralized starting point for various applications and provide a summary of information pertaining to those applications, much like how a car's dashboard provides centralized access to summarized information about various aspects of the car's critical details.
- Retrieve previous years' approved forms, edit and submit without starting anew.
- Upload all supporting documentation (i.e. Item 21 detail, technology plan approval letters).
- Access all certifications at one time annually

A comprehensive portal solution will streamline the application process; provide oversight and support needed to make an effective decision about the information received. Allowing applicants to update and provide information at any time within the constraints of the rules (which may be amended to accommodate the new functionality of the portal) will reduce delays and unnecessary denials. It will also give the applicant the ability to update the information as it becomes available. Access to updated information will also reduce the amount of time needed to review applications.

A portal system will allow the data to be entered one time and accessed multiple times. The system should normalize existing data sources by reducing the need to store information in more than one location within the database structure. The portal system likewise will streamline the notification process to applicants. The system should provide online notifications which will reduce the need to mail paper correspondence. Many organizations (banks and credit card companies) offer users the ability to receive notices and information online versus mailing documents. Some states, like Colorado, are

²¹ SECA filed comprehensive comments to the USAC Schools and Libraries IT Modernization Request for Comments in which our recommendations are set forth in great detail.

undergoing LEAN initiatives to reduce/remove paper processes. The FCC similarly encourages online filings and has extensive multiple online filing systems. The E-rate systems need to be updated for the 21st century too.

SECA would like to extend its support in defining the scope of a new system and we encourage the use of User Acceptance Testing when any improvements or changes are made to the Web site tools and functions in order to ensure that the new tools and functions work in the intended manner.

IV. Assessment of Program Effectiveness

In order to measure the E-rate program's effectiveness, SECA would suggest that any data points considered must also assist schools and libraries in providing cost-effective advanced telecommunications services. Mbps per student, cost per student, or cost per Mbps per student for WAN/Internet data are nearly meaningless if not considered in conjunction with other relevant usage and function data. There is also the concern that setting arbitrary bandwidth needs/limits leaves no room for the innovations that we expect to see in every sector and especially in the area of broadband capacity and speeds.

Recently, both the State Educational Technology Directors Association (SETDA) and Commissioner Jessica Rosenworcel have both recommended similar targets for school access goals shown in the chart below.

SETDA Recommendations from *The Broadband Imperative*:

School Year Target	Speed	Measurement in Students and Staff
External Internet Connection to the Internet Service Provider (ISP)		
2014-15 School Year Target:	At least 100 Mbps	per 1,000 students/ staff
2017-18 School Year Target:	At least 1 Gbps	per 1,000 students/staff
Internal wide area network (WAN) connections from the district to each school and among schools within the district		
2014-15 School Year Target:	At least 1 Gbps	per 1,000 students/staff
2017-18 School Year Target:	At least 10 Gbps	per 1,000 students/staff

Data from: http://www.setda.org/c/document_library/get_file?folderId=353&name=DLFE-1517.pdf

We recommend the following measures be utilized by the FCC in order to avoid restrictions that could later penalize schools and libraries from progressing with innovation:

1. Measure ***accessibility*** of telecommunications and advanced services, including information services, to schools and libraries.
2. Measure ***affordability*** of telecommunications and advanced services, including information services, to schools and libraries.

We decline recommending a specific bandwidth speed for measuring the program's performance goals. The SETDA standards provide starting targets by which to establish goals but since we do not know what future expansion of technology capability will make possible, we believe that specific benchmarks should not be the end all and be all. The best measure by which the success of the E-rate program could be gauged would be whether or not schools and libraries have access to the basic speeds cited by SETDA and whether or not those speeds are affordable to the applicant. Since costs vary even

within the boundaries of a school district, it is difficult to determine set metrics by which to deem cost-effectiveness by comparing school to school, region by region or state to state. Applicants have struggled with Lowest Corresponding Price (LCP) requirements by the FCC. Therefore, it would seem that some form of documentation required by the FCC to any regulated telecommunications provider or E-rate participating service provider in regards to bandwidth should have to publish said Lowest Corresponding Pricing in order for schools to have effective data in order to compare and establish if they are indeed receiving the best pricing for that service.