



September 16, 2013

VIA ELECTRONIC FILING

Ms. Marlene H. Dortch
Secretary
Federal Communication Commission
445 12th Street SW
Washington, DC 20554

Re: Modernizing the E-Rate Program for Schools and Libraries, WC Docket No. 13-184

Dear Ms. Dortch:

The following NPRM comments are provided by Education Networks of America, Inc. ("ENA"). ENA is a managed service provider delivering Internet Access, voice, video and managed Wi-Fi services to K-12 schools and public libraries across the country. ENA has been involved in the E-Rate program since its inception and we have multi-year experience in working with virtually every segment of the school and library communities including rural and urban, large and small, district-wide and statewide, supporting every possible demographic. We are strong believers in the E-Rate program and strong believers in our local customers and their capabilities to implement the E-Rate program to reduce costs and increase service. We are responding to the NPRM to provide our thoughts on how to reduce the complexity of the program while improve results. It is our opinion that the program has become top heavy with rules that create pitfalls for applicants but that do not move the program toward the goals of higher broadband adoption. Our aim with this set of comments is to provide ways to reduce the red tape inefficiencies of the E-Rate program while increasing the efficacy of the program.

ENA's business model is vendor/carrier neutral and includes working with numerous connectivity providers to develop complete solutions for statewide and district-wide networks. Working with our customers, we deliver broadband solutions which leverage underlying connectivity provided from many different sources which increases the bandwidth level and affordability of our service to schools and libraries. We believe we have a unique perspective regarding how to drive and grow broadband in both urban and rural environments.

ENA proposes a series of simplifications and basic measurements designed to meet the goals specified by the FCC in this NPRM. We believe the recommendations that follow will have significant impact in meeting overall program goals. ENA encourages the FCC to delay/defer all other possible changes not specifically referenced in these comments. Other changes should be reviewed after results are known from these recommendations as part of a continuous improvement process.

General Comments

We encourage the FCC to evaluate the impact on the local budgets of applicants before enacting solutions to change the program. Cutting funding for existing services will not increase the likelihood that broadband is adopted. If a needed service such as voice loses E-Rate support, the school or library would then pay three times or more for that service once the current E-Rate support is removed, putting more demand on their local budget. This change decreases the local budget available for broadband services even though the E-Rate program has more funds available. We do not believe that is the desired impact of any of the changes discussed in the NPRM. As such, we recommend that the FCC carefully evaluate the impact on local budgets before cutting E-Rate funding to essential services.

We discourage the FCC from considering a funds distribution that involves a per-student or per-building allocation or cap on funds. While this would provide a fixed budget for schools and libraries, it would severely penalize and promote inequity for small and rural schools that either do not have the student or patron population to offset the costs of service or service upgrades or typically pay more for services in outlying areas. The goal is for all schools and libraries to achieve the ConnectED broadband goal. If schools and libraries cannot receive the funding needed because of their size or rurality, they have no alternative funding offset and will most likely be forced to reduce broadband access services to what they can afford,

not what they need, effectively leaving them behind.

We encourage the FCC to continue to support all advanced services including broadband, traditional voice and VoIP, e-mail, cellular service, text messaging, etc. These are services actively used by schools and libraries today to support their mission critical work. Each is essential in its own way and to focus on only one service (broadband) would be damaging.

We assert that the E-Rate program needs to take a simple measurement of broadband in existence using the Form 471 application process to get a baseline before implementing many of the concepts in this NPRM. The changes proposed to the Form 471 in the separate NPRM will help gather needed broadband data that can be used to determine the real gap from today's connectivity to the 100 Mbps and subsequent 1 Gbps goals.

While proposals for streamlining program administration and maximizing cost-effective purchasing may serve to increase efficiency of the application of available funds, the amount of annual funding available must grow to achieve the objectives of connecting all schools and libraries at speeds required to support evolving learning technologies and the ever-increasing transition to digital services for administrative operational and instructional uses. Internet connectivity services have grown significantly over the last fifteen years (as much as eighty times the 1998 baseline by ENA's estimate) while Priority 1 costs have only doubled.

We believe these statistics clearly indicate that applicants have done a solid job driving costs down over the first fifteen years of the E-Rate program. However, given that the program has a goal to increase broadband by another one hundred times within the next seven years to get to 1 Gbps per school, we should expect Priority 1 demand to at least double to meet that service level. Simply stated, more money will be needed to grow from today's levels to 1 Gbps service levels.

We believe that competitive bid requirements of the program following local bid rules are the best way to get the most cost-effective service. We caution the FCC that cost is not the only factor in determining the best provider. Lowest cost and low quality does not meet educational, operational or FCC goals. That is why we suggest the program continues to specify the most cost-effective solution versus solely the lowest cost one.

Proponents of long-term deals to purchase dark fiber for schools make the case that this is a great way to ensure long-term lower costs. However, we are not convinced. This option has been available to schools and libraries to some extent for many years with limited adoption. We believe that pricing for such services has been artificially low based on expectations for commercial and residential revenue using the networks created to supplement revenues from schools. From our analysis, revenue expected by dark fiber builders to offset the artificially low offer to schools and libraries from potential future residential and commercial services has not met expectations and it is likely that future school and library customers will pay a price that is more representative of the true cost for their dark fiber services in the future.

In addition, we believe a significant portion of the dark fiber currently in place is being provided as consideration for other business (such as franchise agreements) or being offered at discounted rates specifically to schools. We are concerned that such low costs cannot be duplicated across the nation.

Before turning solely to a dark fiber or lease to own fiber policy, we encourage the FCC to make certain that the same contract time horizon is available for all competing vendors regardless of the solution. It is our belief that traditional service is likely to have costs comparable to special build fiber over such a time horizon and that there are significant ongoing maintenance costs with dark fiber after 10 to 15 years that schools will have to address if they own the fiber. More analysis needs to occur before launching the E-Rate program into a school-owned fiber buying frenzy that could occur if the FCC favors school-owned fiber over other delivery methods. We recommend that the FCC not recommend any specific delivery method or technology but instead encourage open competitive bidding that allows all vendors to demonstrate what they can provide to applicants – with similar potential contract terms. FCC should be focused on cost per unit and broadband goal achievement not the methods of broadband delivery or ownership.

Key Points Outline

1. E-Rate Processing Reforms, namely information gathering via Form 471 and statistical sampling during the approval process, can meet initial program measurement requirements and streamlining needs. (Paragraphs 233, 53 and detailed overview in Attachment 1)
 - a. Statistical sampling applied to Form 471 approval process
 - b. Cost testing applied to Form 471 approval process – cost per unit, cost vs. previous year
 - c. Broadband connectivity measured using Form 471 and compared to goals
2. Local choice and competitive bidding remain the best method for cost-effectiveness. The FCC should minimize involvement and rules over that process unless cost testing indicates need for further review and understanding. (Paragraph 202)
 - a. Reducing duplicative and E-Rate program specific rules will speed needed funding to schools and libraries
 - b. The FCC should not directly or indirectly get into the purchasing business
 - c. State law covers all issues that the FCC is trying to manage. Allow state law to handle procurement issues and the FCC should focus its evaluation on cost and broadband goals
 - i. Vendors have the ability to protest, litigate or otherwise contest a procurement under state laws
 - ii. If a contract is valid under state law, FCC rules should not attempt to override that determination
 - iii. The FCC should be neutral regarding how services are acquired – leasing, managed service, buying to own, etc. should all be supportable based on meeting cost standards and program funding capacity
3. Streamline E-Rate forms and paperwork (Paragraph 53)
 - a. Deadlines reduced to two dates by reducing paperwork levels
 - i. Form 471 filing deadline
 - ii. Invoicing deadline
 - iii. A third deadline date would be added for de-obligation of funds which would not require applicant action
4. E-Rate administration focus should change from “funding police” to advocate for advanced service goals. FCC processes should enable getting funding out timely rather than punishing schools and libraries for missteps not rising to the level of fraud. The FCC should work with schools and libraries for success and leave behind many of the current adversarial approaches to administration of the program.
 - a. The FCC should work to fill its mandate of broadband and other advanced services to schools and leave other education efficacy value measures to Department of Education. There are many research reports on the impact of technology and broadband and while it is impossible to specifically measure the impact on education, we know that schools and libraries across the country (similar to other markets) are in a massive transition to digital services which simply cannot be successful without technology and broadband.
 - b. Local control should be allowed to design, manage and monitor networks – the FCC should evaluate costs and speeds and work to understand and address or assist outliers
 - c. Program should work to assist outliers identified to meet cost and speed goals of the program in a collaborative manner
 - d. Eliminate 100% denials for most situations and institute fine system
 - i. 100% funding denials or COMADs do not support program goals in many situations
 1. Recent Spokane, WA FCC appeal denial (100%) for not checking a box on Form 470 indicating that an RFP existed
 - a. Despite 17 vendors involved in the bid and a lawful state contract, E-Rate was rescinded due to competitive bidding “failure”
 - ii. Service providers and applicants should be able to expect E-Rate to be approved and paid timely absent fraud or gross negligence
 - iii. If the local or state contract is valid, E-Rate should pay for eligible service delivered
 - iv. Funding awards should be able to be reduced to market price based on the specific area served (if price is determined to be too high) or in other manners based on the situation instead of 100% funding denial.
 - v. A fine system can be developed to penalize applicants and vendors for violations not leading to funding reductions
 - vi. Improper payment definition not being applied correctly

1. Improper payments should only consist of payments made for services not delivered/used or ineligible services delivered if such was clearly known or a very similar short list. Other payments should be considered proper if they went to pay for eligible services even if such eligible services may have procedural errors in procurement or paperwork.
2. It is unclear if the program considers a minor E-Rate form error that creates a 100% funding denial to be a 100% improper payment.
 - a. We would advocate that such treatment is inaccurate and that likely if not for a minor paperwork error, 100% of the payment would be considered proper
 - b. Need to minimize ways for the program to get punished for “errors” including applicants, vendors and the FCC/SLD (as they also get “punished” for error rates, etc)
5. Revise the Priority System (until such time as full funding is considered available) to target funding to desired areas
 - a. Priority 1a – First priority for broadband – both recurring and construction costs
 - b. Priority 1b – All other current Priority 1 services plus on-premises Wi-Fi connectivity whether purchased by the applicant or delivered as a service
 - i. If funding is not available for 100% of this need, allocate it pro-rata based on student count of those applying or similar – not based on current discount rate priority approach used for Priority 2
 - c. Priority 2 – All other current Priority 2 eligible items – likely to not be funded in current funding shortage situation
 - d. See also Paragraphs 146-148 of our specific comments
6. Make services provided to schools and libraries exempt from USF and related FCC fees. The current approach consumes E-Rate funding cap without providing service. Applicant-selected service providers should be allowed to claim this exemption on any of the inputs they purchase that are used at least 80% or greater for providing service to schools and libraries (for example - providers purchasing lit fiber service from a carrier and selling that as part of their service to a school or library should not be required to pay USF to the underlying carrier, ensuring that these costs are not passed on to the schools or library user).

ENA has not proposed specific targets or guidelines for all of its comments, but is willing to assist with generation of such if desired by the FCC. ENA further recommends that the FCC create a group of applicants, service providers and consultants who can act as an ongoing sounding board, similar to the USAC Board, to the FCC for E-Rate activities including this NPRM.

Our specific line by line comments are included as Attachment 2.

Respectfully submitted,

Rex Miller
Senior Vice-President and Chief Financial Officer

Attachment 1

Key Program Reform Detail Recommendation

E-Rate application processing reforms can meet multiple measurement and streamlining needs.

Program goals include:

- Broadband connectivity increases to 100 Mbps and higher
- More widely available and affordable services
- Detect inappropriate usage of funds
- Streamline and speed-up program processes to make sure all funds are deployed
- Measurement of each of these goals

ENA asserts that a revised 471 review process can address the majority of these goals using the following process:

- Perform electronic testing on 471 applications based on the following criteria:
 - Cost per unit – for example cost per megabit per second for bandwidth – compared to a cost ceiling
 - Total applicant request compared to prior year approved requests – significant increases would need to be reviewed – 30% or higher increase perhaps
- Identify outliers based on these cost and speed tests and require manual PIA review to determine reasons for high cost
 - Many outliers will be resolved based on high cost areas but others will stand out
- Allow SLD to select other outliers based on controls determined with FCC collaboration
- Allow remaining applications not selected for manual testing to be subject to statistical sampling
 - Using well-established statistical sampling methodologies (which appear to already be employed for invoice payment), select a further statistically valid sample for manual PIA testing (likely to be about 10% of the pool to achieve a 99% confidence level)
 - Applications not selected for statistical sampling or outlier testing, will be approved without manual PIA review
- In addition to these tests, the 471 process can also provide needed information on broadband speeds requested versus program goals and provide a list of applicants that the FCC may determine need assistance

Using this new process provides the following value:

- Processing of 30,000 or more of applications filed in Wave 1 without manual PIA review dramatically increasing the ability for schools and libraries to use the funding requesting to meet program goals
- Cost testing focuses FCC/SLD review efforts on 471s that are most likely to need assistance and that can generate program savings based on review – while also identifying the applications most likely to be requested funds for inappropriate uses
- Goals of availability and affordability can each be measured from the 471 testing
- Actual service installed can be testing against broadband goals

If adopted, the value of the speed of processing and the cost testing information should override any risk that inappropriate applications will slip through the testing net. Applications will be approved through electronic testing only if they exhibit reasonable costs per unit and no extraordinary changes from previous funding years.

Attachment 2

Specific Comments to the NPRM in line by line format -

II. GOALS AND MEASURES

1. Proposed Goal

17. The first goal of the E-rate program we propose to adopt is to ensure that schools and libraries have affordable access to 21st Century broadband that supports digital learning. As discussed above, the communications priorities of schools and libraries have shifted as they seek access to higher-speed connectivity and to allow students and teachers to take advantage of the rapidly expanding opportunities for interactive digital learning.⁴¹

18. Section 254(h) of the Act, requires the Commission to enhance access to advanced telecommunications and information services to schools and libraries “to the extent technically feasible and economically reasonable,”⁴² and determine a discount level for all E-rate funded services that is “appropriate and necessary to ensure affordable access to and use of such services.”⁴³ Thus, in considering our statutory obligations and in light of the growing technological needs of schools and libraries, this proposed goal has two components. The first component of this proposed goal requires that all schools and libraries have access to high-capacity broadband connectivity necessary to support digital learning. The second component of this goal is that schools and libraries be able to afford such services.

19. We also seek comment on whether we should adopt specific goals for other communications services, including voice services. If so, what should those goals be and how can we best harmonize those goals with our proposed goal of ensuring schools and libraries have access to 21st Century broadband that supports digital learning?

ENA Comments:

ENA agrees with the goal to enable all schools and libraries to have access to high-capacity broadband. We further comment that “advanced telecommunications and information services” should not be restricted to only broadband but include other advanced services necessary to operate our nation’s schools and libraries including voice/VoIP services, e-mail, cell service/text messaging, etc. Each of these components has been effectively integrated into education and operation of our schools and E-Rate funding is a critical component of maintaining that infrastructure.

Selecting broadband as the most important goal and measuring progress against this primary goal is a practical and effective way to move forward. Additional goals for other services may be valuable in the future, such as goals for voice services, however, broadband is the most important item to measure at this time.

2. Proposed Measurements

20. We seek comment on what performance measure or measures we should adopt to support our proposed goal of ensuring eligible schools and libraries have affordable access to high-capacity broadband at speeds that will support digital learning. We also seek comment on how best to perform the relevant measurements.

21. One of the primary measures of progress towards meeting this goal would be benchmarking the performance of schools' and libraries' broadband connections against specific speed targets. We also seek comment on other measures of the availability and affordability of high-capacity broadband to schools and the educational impact of high-capacity broadband in the classroom. We seek comment on whether these are the areas on which we should focus in measuring progress towards this goal. We also seek comment on how other network performance measurement efforts, including the Commission's own Measuring Broadband America Program,⁴⁵ should inform our consideration of how to measure network performance. Commenters are encouraged to propose any additional or alternative measures.

ENA Comments:

ENA asserts that gathering basic information such as connection speed and cost through the Form 471 (blocks 2 and 5) is the first step that the program should take to begin to measure the current status of broadband for schools and libraries. Once that data is gathered, more measures may be valuable, but until that basic information is developed many of the additional measures mentioned in this section of the NPRM may have limited value, produce wildly varying results without the ability to align to school and library broadband goals or ultimately may not be needed. It is the belief of ENA that while many school systems will indicate that they don't have enough bandwidth; that information needs to be collected in a systematic manner using the Form 471 to get a quantified understanding before any additional measurement practices are adopted. Once that information is known, it is likely that more targeted practices (such as analyzing schools and libraries who are at the lowest levels of bandwidth) may be a better use of E-Rate and school resources than a pervasive measurement system required for all applicants – even ones that clearly have already met FCC goals.

Note that the data in Block 2 (now Block 5 under the proposals in the 471 NPRM) of the Form 471 must be made mandatory and not optional in order to gather complete data. Mandatory in this case should mean either that (1) form could not process on-line if those boxes are left blank and/or (2) if data is not complete, PIA should be required to ask for that data.

22. **Connectivity metrics.** We seek comment on how to define "broadband that supports digital learning" for purposes of measuring progress toward our first goal. President Obama's ConnectED initiative set a target of at least 100 Mbps service with a target of 1 Gbps to most schools and libraries within 5 years.⁴⁶ The ConnectED proposals are consistent with those made by the State Education Technology Directors Association (SETDA). According to SETDA, in order to have sufficient broadband access for enhanced teaching and learning, K-12 schools will need Internet connections of at least 100 Mbps per 1,000 students and staff (users) by the 2014-15 school year and at least 1 Gbps Internet access per 1,000 users by the 2017-18 school year.⁴⁷

23. We seek comment on adopting the SETDA target of ensuring that schools have 100 Mbps per 1,000 users increasing to 1 Gbps per 1,000 users.⁴⁸ SETDA also recommends that a school within a district have Wide Area Network (WAN)⁴⁹ connectivity to other schools within their district of at least 10 Gbps per 1,000 students and staff by 2017-2018.⁵⁰ We also seek comment on adopting that target for WAN connectivity.

24. More specifically, we seek comment on whether the SETDA targets are appropriate for all schools, or whether we should set some other minimum levels of broadband speed necessary to meet our proposed goal, and what those levels should be. How much capacity do schools currently use? How are schools' bandwidth needs changing, particularly in those schools that have one-to-one device initiatives? We also seek comment on what our goals should be for schools or school districts with less

than 1,000 students and staff if we do adopt the SETDA targets. Will schools with 500 students need 500 Mbps Internet capacity, and how much WAN connectivity will they need? How about schools with 100 students? We also seek comment on the timing of reaching these proposed bandwidth targets for schools. What percent of schools currently have 100 Mbps per 1,000 users? What percent of schools currently have 1 Gbps per 1,000 users? How quickly are schools already moving towards these targets? What percent of schools currently have fiber connectivity to the school? How much would it cost to reach these targets?⁵¹ What are the challenges for schools and the E-rate program in meeting these targets?

25. We also seek comment on the appropriate bandwidth target for libraries. According to the Gates Foundation, the State Library of Kansas has developed a broadband capacity tool that recommends that all libraries have a minimum of 1 Gbps Internet connectivity by 2020 and recognizes that libraries with a large number of connected users will likely need even greater capacity.⁵² We seek comment on whether a target of 1 Gbps for all libraries by 2020 is an appropriate measure or whether we should set some other minimum level of broadband speed for libraries necessary to meet our proposed measure and what that should be. We also seek comment on whether we should adopt a WAN connectivity target for libraries interconnected by WANs, and if so, what that target should be. We also seek comment on the target date of 2020 for libraries to have 1 Gbps Internet connectivity. What are the challenges to libraries and the E-rate program of meeting this goal? What percent of libraries currently have 100 Mbps connectivity? What percent of libraries currently have 1 Gbps connectivity?

26. Further, we seek comment on whether there are schools and libraries in some extremely remote parts of our country where the SETDA and the State Library of Kansas capacity targets may not be economically feasible. If so, why are the SETDA or the State Library of Kansas targets unfeasible and what are feasible connectivity targets or benchmarks for those extremely remote geographic areas?

ENA Comments:

ENA is generally supportive of the measurements recommended by SETDA, the National Broadband Plan and ConnectED. However, we believe such measures should be used to determine which schools and libraries should be contacted and interviewed (over time perhaps, with lowest speeds contacted first based on information collected on the Form 471) regarding why they are not reaching the set goals.

ENA has found over the years that it can be a long and very location specific process to deliver high-speed broadband to hard to serve locations at affordable prices. The FCC should understand this and invest in providing assistance to districts (and communities) that need help attracting broadband with the understanding that such process is likely to take either significant time or larger expenditures to be successful.

ENA believes that you will find many school systems that are not permanently at the levels suggested for very solid reasons including systems that have the ability to move to higher speeds very quickly in the event that utilization needs increase. The FCC should seek to understand how applicants manage their bandwidth usage, highlight best practices and offer assistance to those in need. ENA believes the FCC will find many examples of best practices in bandwidth management.

27. As part of the ConnectED initiative, President Obama also called for high-capacity connectivity within schools, and others, including the bi-partisan LEAD Commission, have echoed that proposal.⁵³ We seek comment on adopting specific bandwidth targets for wireless connectivity within schools, similar to our targets for Internet and WAN bandwidth. Specifically, we seek comment on whether all schools should have internal wireless networks capable of supporting one-to-one device

initiatives, and whether libraries should have comparable wireless connectivity. We seek comment on more quantitatively defining these standards. Should we define connectivity in Mbps of wireless capacity available per-student in classrooms, school libraries, and other areas of schools? Should these match the Internet or WAN connectivity recommendations of SETDA? For example, building off SETDA's 2017 recommendation of 100 Mbps Internet connectivity per 1000 students, should we aim for 1 Mbps of wireless capacity per 10 students in classrooms and other learning spaces? What would this standard generally require to implement? We seek comment on this proposal and on alternative bandwidth targets.

ENA Comments:

While ENA supports E-Rate eligible wireless connectivity within schools, ENA believes that there are too many local variables for a one-size fits all standard including school physical design, devices being connected, etc. The FCC may consider providing best practices information and other tools to assist schools in making the best decisions, but probably should avoid trying to manage down to this level. If the FCC decides to set a target in this area, it should be as a guideline used to determine which applicants should be contacted to determine if assistance is needed. If wireless or wired connectivity within schools becomes a priority of the program as anticipated in this NPRM, we recommend that Form 471 Block 2 (or Block 5 under the 471 NPRM) be expanded to include specific questions about number of wireless or wired connections inside the school to allow some initial evaluation of cost per unit (either speed or student) to be performed.

As a further comment, we encourage the FCC not to mandate a wireless or wired solution but instead to evaluate each based on funds requested/needs met rather than technology selected.

28. Many of the applications that enable digital learning require not just high-capacity connections, but also high-quality connections that have associated latency, jitter and packet loss requirements. For example, online viewing of a real-time science lecture and demonstration requires low latency (transmission delay), low jitter (variability in the timing of packets' arrival), and low packet loss. Should we adopt latency, jitter and packet loss performance requirements tailored to the specific uses of broadband connectivity by schools and libraries to ensure successful learning experiences? If so, what such requirements should be?⁵⁴ We also seek comment on how best to update network performance requirements as technology and network uses evolve.

ENA Comments:

Given the lack of basic information about the levels of connectivity deployed in schools today, we would defer this recommendation until a better understanding of what is currently installed is available. While we would encourage the FCC to consider providing best practices guidelines for local entities to consider adopting, we are against this level of comprehensive measurement from the FCC level. We would anticipate numerous other pressures on school systems to get their technology right in order to support on-line coursework, testing and administrative functions. Those requirements should be enough to incent schools to have functional networks. Adding a potentially expensive and time consuming additional measurement and monitoring function at this time seems unreasonable.

29. *Using adoption to measure availability and affordability.* The simplest measure of broadband availability and affordability for schools and libraries may observe whether eligible schools and libraries are purchasing broadband services that meet our proposed speed benchmarks. We therefore seek comment on whether to measure school and library broadband speeds as one metric of broadband availability and affordability.

ENA Comments:

Please see ENA's main recommendation regarding information gathering and cost testing via Form 471 approval process. Availability and affordability can each be measured using broadband speeds and cost information collected by the Form 471. We assert that cost per megabit per second or similar speed unit is the single best way to measure for many of the Program's goals.

30. If we adopt this proposal, we seek comment on how best to collect data on the speed and quality of school and library connections. Currently, all schools and libraries must complete an FCC Form 471 application when applying for E-rate funding, and among other things, are requested to provide information about the level of broadband services requested on that form.⁵⁵ The Commission is currently seeking comment on modifying the FCC Form 471 to collect more detailed information from applicants on connection speeds and the types of technologies being used for connectivity.⁵⁶

ENA Comments:

ENA encourages the FCC to use the Form 471 to gather all information needed on connection speeds and service requested.

31. We seek comment on additional ways to update the FCC Form 471 to provide information necessary to monitor and measure our proposed goal.⁵⁷ Should we require that E-rate applicants provide specific information about the bandwidth or speed for which they seek funding? Should we make that information publicly available? Should there be specific, required mechanisms for making the information public? For example, should we require such information be published on data.gov?

ENA Comments:

We encourage inclusion of bandwidth speed in Form 471 Block 2 (or Block 5 under the 471 NPRM) as a mandatory field. The Form 471 is currently available to the public on the SLD website. We would encourage adding this information and other similar key information to the SLD's Data Retrieval Tool ("DRT") which is used by many to review aggregated information by applicant or service provider. The DRT is currently being used to support several popular third party web tools that report and allow searching of E-Rate information.

Providing the data in these manners should allow the FCC to consider the information publicly available. We do not believe there is a need for a new database or publication of this information on data.gov.

32. Should we adopt additional measures based on information we gather? For example, should we measure the difference in each school's or library's baseline capacity and speed for each workstation or device over a specified time period?

ENA Comments:

Given the lack of basic information about the levels of connectivity deployed in schools today, we would defer this recommendation until a better understanding of what is currently installed is available. Once that information is gathered from the 471 process, additional measures may be needed. We would recommend in general that the FCC not become involved in this level of monitoring as local resources are typically capable of these roles without assistance. We do not expect this information to be worth the cost of gathering it. We further recommend that such invasive measures should not be applied universally. Schools and libraries that are meeting cost

guidelines and bandwidth goals should not be required to undergo this additional testing.

ENA would recommend that the FCC consider measurements adjustment to be an ongoing process rather than something that is worked on every five years. It should be more like the ESL process than the current large reform effort.

33. We seek comment on whether there are other methods we should consider adopting for measuring broadband performance, including not only bandwidth available but actual usage as well. We also seek comment on how measuring actual usage would take into account the different possible reasons for level of usage. For example, how would such a measurement account for schools that use broadband connections less because the speeds available are too slow for use of educational software or other reasons? In addition, how do we account for levels of usage that vary based on the availability of teacher technology training? In addition to collecting information on the FCC Form 471, should we conduct an annual or biennial survey to assess the broadband capability of schools and libraries? If so, should it be modeled on the survey of E-rate recipients that the Commission conducted in 2010?

ENA Comments:

In general, we believe that the FCC should allow the local school system to manage this level of technology performance. The FCC does not have the resources to review the level of information that this suggestion requests. We recommend that the FCC focus on its mandate of increasing the level of broadband adoption and not attempt to measure at this level. Information gathering should be concentrated in the Form 471 process. Additional surveys should be deferred until basic data is collected. We again encourage the FCC to evaluate information received on the Form 471 to determine schools and libraries that are not meeting broadband goals and focus specific efforts on working with those applicants to generate improvements.

34. In the alternative, should we require some or all E-rate applicants to have dedicated equipment measuring performance to and within each of their buildings? If so, what would be the cost of such a requirement and what would be the benefits? Should we require applicants to pay for such equipment or provide E-rate support for such equipment and the related information collection? Should we make the collected information available to the public? We ask for recommendations on performance measurement systems that are low cost and of minimal burden; easy to implement; low-impact; that will produce uniform results and test a full range of performance metrics; and that include a proven design and are generally accepted as valid testing.

ENA Comments:

This is an extremely expensive and invasive option given no specific data that schools and libraries are not managing their networks efficiently. We are not in favor of this recommendation and doubt a solution that meets all the listed requirements exists. Even if it does, the expenditure does not create more bandwidth for students and therefore, it seems to be a wasteful choice.

35. Are there other less burdensome methods that would still ensure we are able to examine and employ useful information in lieu of requiring all applicants to employ equipment to test broadband? For example, could we test a sample of schools? Are most schools and libraries or their service providers already measuring the speed of their broadband connections? Are there cost-efficient ways of collecting that information from schools and libraries? Several years ago, the Commission created the Measuring Broadband America Program to measure residential broadband performance.⁶⁰ Should we adopt a national performance measurement system for schools and libraries similar to our Measuring Broadband America Program? If so, how could we accommodate measuring not only average

or peak performance but also actual usage? We recognize that some third parties are already attempting to collect some such information. For example, Education Superhighway is encouraging schools to participate in its national School Speed Test program. Are there ways the Commission can use the information collected by Education Superhighway or other third-party groups to measure progress towards this goal?

ENA Comments:

ENA recognizes the desire of the FCC to improve the efficiency of applicant networks. However, we are not convinced that FCC involvement would result in any improvement at this level as most applicants face unique networking and connectivity issues that are best solved on a local basis. Speed testing tools and programs while potentially indicative of utilization and speeds at an instant of time have many barriers to consistency of measurement and therefore, we believe that they are as likely to create false indications as accurate ones.

ENA contends that local systems and their vendors are typically monitoring and managing this aspect of networking and should be allowed to continue to do so without involvement from the FCC. We cannot see the value of spending additional government funds to have the FCC essentially look over the shoulder of the local technical staff that is already working to monitor network performance.

We would recommend that if the FCC feels the need to be involved at this level that they consider gathering networking best practices and potentially offer specific assistance to applicants with high costs or low bandwidth speeds. Over time, such a program is more likely to generate positive improvement than a secondary national monitoring system.

36. As part of measuring progress towards the goal of ensuring eligible schools and libraries have affordable access to high-capacity broadband at speeds that will support digital learning, we seek comment on how to measure high-capacity broadband availability and affordability and the metrics that should be used.

37. For example, to measure availability, should we use the National Broadband Map to estimate what fraction of schools and libraries have access to at least one broadband provider within the same census block offering broadband at speeds that meet our proposed performance metrics? If so, what geographic vicinity should we use? Should we use census blocks as the measure? Should we supplement National Broadband Map data with other information? Instead, or in addition, should we collect data on the number of zero-bid service requests as a measure of service availability?

ENA Comments:

As mentioned in other comments, we would recommend that the first step to measure availability is to mandate completion of a comprehensive 471 Block 2 (or Block 5 under the 471 NPRM) collecting broadband speeds. Once this initial data is collected, the FCC can target applicants that are least compliant with broadband goals and attempt to provide specific assistance. Global data on availability of broadband is difficult to apply to specific schools and libraries. Simple barriers such as hills, roads, railroad tracks, etc. can cause broadband availability to differ even over relatively short distances.

38. Similarly, to measure affordability, we could benchmark the post-discount prices paid by schools for broadband connections against some objective measure. We seek comment on this approach, and on what measures we could use. Would there be benefit to conducting an annual or biennial survey to measure school and library perceptions about affordability? If so, what questions

should we ask? Alternatively, should we survey just those schools that do not adopt broadband connections meeting our performance targets to find out why they have not done so?

ENA Comments:

As indicated in our summary comments, we recommend evaluation of cost per bandwidth unit as the main measure for funding approval and program control. Such testing, utilizing data collected on Form 471, should identify those applicants with higher cost and therefore, provide the FCC with a shorter list of applicants to work with to determine why costs are high. In addition, the Form 471 data will be able to identify those applicants who have not yet met bandwidth goals. We agree that survey of just those schools will help to identify barriers that can be worked on at the local level. No additional broad survey of all applicants should be necessary.

For example – the 471 process might determine an applicant is only at T-1 level speed. Communication with that applicant may indicate that there is no local availability of fiber or perhaps the applicant does not know about the availability of a state contract that is available or many other locally driven reasons. That level of information for those that need help will be needed to lift all applicants to target levels.

39. We also seek comment on whether the Commission should measure compliance with its “lowest corresponding price” rule as a measure of affordability to ensure that service providers are providing schools and libraries with the lowest corresponding price for E-rate supported services that a provider charges to a similarly situated non-residential customer. The rule mandates that service providers cannot charge schools, school districts, libraries, library consortia, or consortia including any of these entities a price above the lowest corresponding price for supported services, unless the Commission, with respect to interstate services, or the state commission with respect to intrastate services, finds that the lowest corresponding price is not compensatory.

ENA Comments:

Specific testing of LCP compliance seems to be a difficult and time consuming task. There are many challenges to the generic definitions of the LCP rule that at best make utilization of this as a measure problematic. ENA recommends, consistent with our previous comments; that the FCC use cost per unit data provided on the 471 as the prime guideline for identifying high cost applications. Further testing and inquiry with those applicants will accomplish the same goals more efficiently.

40. *Educational Impact Measurements.* Is there a way to measure how success in the classroom is affected by access to E-rate funding or services supported by E-rate? Stakeholders have, in the past, raised concerns with attempts to correlate E-rate funding with educational outcomes. Critics claim that because classroom performance is affected by many factors, there are no reliable conclusions to be drawn. However, proponents believe that assessing the contribution of digital learning and E-rate funded connectivity towards student outcomes may guide schools in determining the bandwidth and usage of broadband that are most effective as well as provide us guidance in ensuring that universal service dollars are efficiently spent. Is there a way to measure how success in the classroom is affected by access to E-rate funding or access to Internet access services? If so, what should such measures look like, and should they be tied specifically to E-rate funding or more generally to the deployment or use of broadband and next-generation infrastructure? A 2006 study by Austan Goolsbee and Jonathan Guryan found that E-rate support substantially increased the investment of some public schools in Internet and communications technologies, but did not find a statistically significant effect on student test scores.⁶⁴ Have more recent studies suggested otherwise? We also seek comment on whether the Commission should adopt educational-outcome measurements. Is it appropriate for the Commission to do so, given that educational outcomes are outside the agency’s core competence? Are there any legal or

jurisdictional issues with doing so?

ENA Comments:

E-Rate has been given a mission by Congress and the President to get broadband and other advanced telecom services to schools and libraries. The presumption is that technology will assist schools to meet already established instruction, assessment and other education goals. Measure of education success should be performed by the Department of Education. Multiple measures of schools success exist and the disaggregated effect of technology cannot be determined (however, the absence of technology seems to lead to failure). We recommend that the FCC embrace the presumption that is supported by most in the world that technology is needed and complete the mission to deliver broadband services pervasively (don't get blinded by the detractors – or waste precious funds trying to prove technology alone improves education).

C. Maximizing the Cost-Effectiveness of E-rate Funds

1. Proposed Goal

41. We propose to adopt, as the second goal of the E-rate program, to maximize the cost-effectiveness of E-rate funds.⁶⁵ Ensuring that schools and libraries spend E-rate money in the most cost-effective ways possible maximizes the impact of limited E-rate funds and helps ensure that all eligible schools and libraries are able to receive all the support they need. Funds available through the E-rate program come from contributions made by consumers and businesses to the USF, and the Commission has a responsibility to ensure they are spent effectively.

42. This proposed goal is consistent with section 254(h)(2)(A) of the Communications Act, which requires that support to schools and libraries be “economically reasonable.”⁶⁶ As the Commission has previously observed, we have a “responsibility to be a prudent guardian of the public’s resources.”⁶⁷

We seek comment on this proposed goal.

2. Proposed Measurements

43. We seek comment on what performance measure or measures we should adopt to support the goal of maximizing the cost-effectiveness of purchases made using E-rate funds. Should we measure the value delivered to schools and libraries with support from the E-rate program by tracking the prices and speed of the broadband connections supported by the program? Should we measure an applicant’s costs per-student and costs of products and services in comparison with other costs for products and services available in the marketplace? Are there additional data we would need to require from applicants to track relevant measures, or are there existing data repositories we could use for this purpose? Above, we seek comment on a number of possible affordability measures. Should we use any of these to measure cost-effectiveness instead of, or in addition to, affordability?

44. What data will best allow us to track these metrics? Should we encourage studies on the impact of E-rate support on prices paid for services? We currently report on the results of USAC’s audits, and progress in reducing improper payments and waste, fraud and abuse. Should we use this information as part of this measurement?

ENA Comments:

We believe the goal is absolutely critical and that measurement should be simple - take bandwidth delivered to school system and compare to cost - and determine the overall cost/unit - as an initial step evaluate whether that trend is improving (lower overall cost/unit) or not - then focus time, energy and resources on assisting applicants with information on how to improve - focusing on the high cost applicants and underserved applicants first as determined by the metrics from the program applications. Keep the measurement simple and focus on helping those needing it the most. Coordinate efforts of the FCC high cost program to push bandwidth to underserved and high cost areas (i.e. maybe the high cost program should help pay to make school bandwidth affordable - not just the E-Rate program)

The program will need to consider whether to delay delivery of broadband to certain high cost sites where the local community also does not have broadband or the site is exceptionally remote. The E-Rate program unfortunately cannot afford to pay to build single site broadband networks without additional funding assistance.

D. Streamlining the Administration of the E-rate Program

2. Proposed Measurements

47. We seek comment on what performance measure or measures we should adopt to support the proposed goal of streamlining the administration of the E-rate program. In 2007, the Commission adopted certain output measurements for evaluating the effectiveness of the E-rate program related to the application and invoicing processes and the resolution of appeals submitted to USAC. Specifically, the Commission required USAC to provide data, on a funding year basis by reporting the number of applications and funding request numbers (FRNs) submitted, rejected, and granted, and the processing time for applications and FRNs. The Commission also required USAC to document the amount of time it takes to make a billed entity applicant reimbursement payment to the service provider, and the number of paid and rejected invoices. Additionally, the Commission required USAC to determine the percentage of appeals resolved by USAC within 90 days from the date of appeal, and how long it takes to process 50 percent, 75 percent, and 100 percent of the pending appeals from the schools and libraries division.

48. What additional measurements should we adopt? The State E-rate Coordinators Alliance (SECA) previously suggested establishing deadlines for making priority one funding commitments and the payment of invoices. As noted above, the Commission currently requires USAC to report data measures for commitments, disbursements and appeals. Should specific targets be established for each of those categories? If so, how should we establish those targets? Should we require USAC to improve on those targets each year or to maintain a certain level of performance?

ENA Comments:

There should be a deadline developed for approvals and invoice payments. The result of not achieving such deadlines should result in explanatory reporting to school systems. We would recommend that this requirement be implemented in concert with other administrative streamlining efforts (see summary recommendations to streamline approval process with statistical sampling methods) that would allow the deadlines to be hit for most applications. We would recommend an initial deadline of 9/30 for FCDLs and quarterly updates after that. In the second year of implementation, we would change the 9/30 deadline to 7/31. We would recommend that any invoice not paid in 60 days (that was not rejected for specified cause) get an explanatory notice from USAC.

USAC should report the volume of such items not meeting deadlines to the FCC.

We believe these requirements will provide incentives to USAC to meet the targets and that the result of not hitting the target will serve the transparency goal of information to applicants.

Appeals could use a target of 90 days as well before requiring an update to the applicant/filer - however, the hope is to develop methods to reduce the number of procedural pitfalls that have historically created the high volume of appeals. We encourage the use of partial funding reductions and fine systems as described later in our comments instead of 100% denials to allow FCC/SLD/Applicant to agree on the funding amount/reduction/penalty in advance of the FCDL issuance – again reducing the volume of appeals.

49. Should we set goals for funding commitments by USAC to applicants as compared to actual disbursements by funding year? In addition, how should we ensure the administrative budget is appropriate for the program? Should we establish targets for the cost of administering the program compared to the program funds disbursed to recipients? Should we measure the number of students and patrons served with E-rate funding over a specified period of time? If so, what should we compare the results to? For example, should we compare it to other federal programs that administer the disbursement of subsidies, such as other USF programs, the Broadband Technology Opportunities Program (BTOP) or educational grant programs?

ENA Comments:

We believe the improvements in timing of application funding as driven by our summary streamlining recommendations and recommended goals in comments to paragraph 48 will help drive a larger utilization percentage of funding commitments. We do not believe additional goals are needed.

Administrative cost targets are secondary to broadband goals. We would not recommend setting targets indicated in this item nor trying to compare program costs with other programs. In general, we do not believe that the information generated at this stage in the program's life would create value. Currently, the program has significant delays in approving applications and processing appeals. It is likely that more investment in staff – especially related to systems – is needed before any efficiency in staffing could be generated. We recommend deferring these measures until a later date when processing goals are being met.

50. We also seek comment on whether we should adopt a proposal by SECA that USAC be required to retain an independent third party to perform an annual analysis of the barriers to schools and libraries participating in the E-rate program. If such an analysis is warranted, should it be performed annually, as proposed, or on some other time period, such as every three years?

ENA Comments:

The SECA recommendation to use a third party to evaluate barriers is a reasonable one. However, it seems that it should be deferred until initial E-Rate reforms are decided and implemented. There is a list of things already known to fix and it seems wasteful to have an audit at this point to just confirm much of what we know. Perhaps later if the steps that are adopted do not bring desired results, we could then adopt such a measure. However, we are hard pressed to determine where such a resource would come from to perform this function in a valuable manner as most E-Rate knowledgeable people would have a conflict either before or after such an engagement.

In addition, USAC resources are constrained just like applicant, FCC and E-Rate funds. To have them spend time with an auditor seems less productive than having them work on known items that can be addressed from this NPRM.

51. We are also mindful of the cost to applicants associated with participating in this program and we seek ways to reduce and measure these costs. Should we collect data regarding administrative costs E-rate applicants incur throughout the application process? If so, what are the best methods to obtain that data? Should applicants be required to disclose on an FCC form the amount of time and cost spent preparing an application? Should we instead consider a survey or sample of participants to obtain this and other information relevant to determine the financial impact including, for example, the cost of hiring an E-rate consultant?

ENA Comments:

Applicant cost of program administration is a side effect of the complexity of the program as it is administered today. We recommend not seeking this information, if the FCC ever seeks this information, until after reforms/streamlining are in effect. Time taken by USAC or FCC to seek and understand the information would be better spent on proactive improvements at this time. Accuracy of applicant input would also vary as other than perhaps a consultant fee amount, other costs are likely not tracked in any detail such as hours spent, etc. and estimation errors/bias are likely to arise in the reporting.

There is a significant sentiment in this NPRM that consultants are an inappropriate use of local funds. We believe that the FCC should allow locals to make that determination and focus on simplifying the program (which might lower the use or cost of consultants). It is unfair to consider consultants as a negative to the program as many times applicants cannot keep up with the program and consultants can do so for multiple customers and improve compliance. The FCC statements seem to presuppose that the local applicant has personnel who could perform the consultant task at no additional cost to the district and that is likely a flawed premise. In the event that consultant cost or control is an issue to the FCC, perhaps proactive consultant training and skills certification (as championed by EMPA) could help improve this part of the program. The FCC should look for ways to improve program participant knowledge and skills vs. apply additional burdens.

E. Data Collection

52. Finally, we seek comment on a number of cross-cutting issues regarding the collection of accurate, relevant and timely data to track our progress in meeting these goals. We seek comment on the benefits and burdens of requiring E-rate recipients and service providers to provide data to USAC in open, machine-readable formats in order to enhance the accessibility and usefulness of the data. We also seek general comment on what data we collect during the application and disbursement process that should make public. Are there any barriers to making public any data we collect that helps measure our progress towards meeting our proposed goals? Will making such data public encourage the public to develop new and innovative methods to analyze E-rate data? If there are concerns about protecting the confidentiality of some of the data, are there ways to protect sensitive information while still making public the most relevant data or are there ways to aggregate the data to obviate confidentiality concerns? Finally, we seek comment on the extent to which we should apply the principles of the Office of Management and Budget's (OMB's) Open Data Policy to our efforts to collect and share E-rate data?

53. In addition to the specific revisions suggested above, should we revise any of the Commission's E-rate forms, such as the FCC Form 471 application, Item 21, or the FCC Form 500, to collect new data, or to change the formats in which we collect data? For example, should we revise the Item 21 attachment to the FCC Form 471 to collect data more consistently from all applicants? Are there ways we can change the format of the Item 21 to collect more granular data in a way that will allow us to more easily identify what products and services applicants are purchasing and at what prices? Commenters who advocate changes in data collection should indicate which form(s) and what specific revisions we

would need to make on those forms in order to ensure that we receive useful information.

ENA Comments:

We believe that for the initial attempt at improved data collection that such data should be collected using the Form 471 including incorporation of the Item 21 attachment into the body of the 471. We support modifications to the 471 in Block 2 and Block 5 to allow gathering data currently on Item 21 more consistently and to gather data that is necessary for the first measurement of broadband goals. Additional or more precise measures may be added over time based on the initial results.

Specific form recommendations –

- *Form 470 – eliminate this form – see comments later in this NPRM including comments to paragraphs 202 through 206. Rely on DRT as the single public information source for potential procurements as well as state and local rules. All certifications on Form 470 are duplicated on Form 471.*
- *Form 486 – eliminate this form – see detailed comments later in this NPRM including comments to paragraphs 251 and 263. Rely on the invoice review process and applicant review of disbursements on DRT to evaluate service start date. Certain 486 certifications regarding CIPA and other items should be moved to Block 6 Certifications of Form 471:*
 - *Form 486, Block 4, Item 9 – certifies existence of contracts or tariffs as applicable – may need to be modified for any changes to the signed contract rules as discussed in this NPRM*
 - *Form 486, Block 4, Item 11 – certifies CIPA compliance. This certification is for any administrative authority, which we recommend is now each 471 filer.*
- *Form 472 – BEAR – eliminate signature from vendor – applicant should sign and submit form – invoice review process can determine if more information is needed which could include copies of vendor invoices or other information direct from the vendor*
- *Notification letters – eliminate all Notification Letters that do not provide new information and utilize the DRT to indicate that activity has occurred. Letters that can be eliminated include:*
 - *Receipt Notification Letter (RNL)*
 - *Receipt Acknowledgement Letter (RAL)*
 - *Allow corrections directly through PIA without a time deadline.*
 - *Do not allow increases in funding through PIA – such errors must be corrected prior to 471 filing deadline*
 - *486 Notification Letter – no longer required*
 - *Item 21 not received letter – no longer required if the Item 21 is merged with the 471*
 - *471 not filed letter – no longer required if 470s are eliminated*
 - *470 and 471 not certified letters – even if 470 is not eliminated, this letter could be eliminated for 470 and 471 and certification requested during PIA or later without penalty. Invoicing could withhold payment for missing applicant certification.*
 - *486 Not Filed letter – no longer required if 486s are eliminated*
 - *Bear Notification letter – not needed – DRT and on-line Bear system can be used*
 - *Electronic notifications to applicants and vendors of approvals, invoice processing, disbursements, etc. are providing new information and worthy of continuing*
- *Technology Plan – eliminate requirement for Technology Plan for E-Rate including requirement to have Technology Plan approved. School systems have Tech Plans in place for numerous programs and having specific additional E-Rate requirements is duplicative. Require applicants to be able to describe their technology planning if needed based on 471 review process. FCC can then assist applicants who are faulty in technology planning to improve.*

- *Funding Status Tool – merge the Funding Status Tool with the Data Retrieval Tool to allow multiple entities to be reviewed at same time.*
- *Data Retrieval Tool – expand the role of the DRT to be the main data source for program activity. Add the following fields to the DRT:*
 - *Contract End Date or MTM designation from 471 data*
 - *Number of students from 471 data*
 - *Number of sites from 471 data*
 - *Information from Block 2 (or Block 5) of Form 471 –*
 - *Internet Speeds*
 - *WAN site speeds*
 - *Phone connections*
 - *Other items as applicable*
 - *De-obligation date for FRN – if such date is adopted*
- *Quarterly Disbursements Report – eliminate this separate report and replace it with use of the DRT to review disbursements by FRN*
 - *Require applicants to certify on Block 6, Form 471 - use of the DRT to review disbursements made to vendors*
- *Form 471 – should be filed by all applicants, even ones that only use consortia, to demonstrate compliance with program certifications*
 - *471 with requested funding would continue to have a required filing deadline*
 - *471 that is “certify only” could be filed without penalty after the deadline if missed (for example during PIA)*
 - *471 would be the equivalent certification tool to the vendor Form 473*
 - *Block 2 (or Block 5 under the 471 NPRM) of 471 should become mandatory and be the prime location for the collection of service data for the program. This information may be most of the information currently on Item 21 attachment for Priority One services.*
 - *Differentiate between WAN service and Internet Access*
 - *Include box for total number of sites and total number of circuits*
 - *For Voice services, should include separate lines for:*
 - *# of PRIs, T1s or IP Trunks*
 - *# of voice extensions – Centrex, Hosted VoIP or similar*
 - *# of analog/POTS lines*
 - *Block 5 should be adjusted to incorporate data regarding Item 21 attachment and for elimination of other forms*
 - *Box 11 – likely should now just have boxes for Priority One and Priority Two – no additional levels of detail*
 - *If our recommendations are adopted, this is where Priority 1a, Priority 1b and Priority 2 would be listed*
 - *Box 12 – 470 form number would no longer be required*
 - *Box 15b – not sure if this provides any valuable information, recommend deleting*
 - *Box 16a and 16b – not sure if this provides any valuable information to the SLD, recommend deleting*
 - *Box 21 – rework this box to avoid having a second form for the Item 21 attachment – extend the form to multiple pages or use the information on Block 2 for Priority One service. Much of the online Item 21 could be incorporated here or as a separate section of the Form 471.*
 - *New Box – consider a check box for applicants who only use consortia to indicate that the 471 is for certification only*

- *Box 22 – it appears that item a will no longer be needed if recommendations on district aggregate discount rate are accepted.*
- *Form 471 and Form 470 if it continues – SLD systems should be revised to allow an on-line cancelation option creating a status of canceled in the system. This option will be necessary for 471s to allow for cost based testing of 471s to occur effectively. Cancelation of duplicate or incorrect 471s cannot wait until manual PIA review.*

III. ENSURING SCHOOLS AND LIBRARIES HAVE AFFORDABLE ACCESS TO 21ST CENTURY BROADBAND THAT SUPPORTS DIGITAL LEARNING

B. Focusing E-rate Funds on Supporting Broadband to and within Schools and Libraries

65. To support the goal of ensuring that schools and libraries have access to affordable high-capacity broadband, both to and within schools and libraries, we propose to update the E-rate program's funding priorities, and seek comment on how to do so. In particular, we seek comment on possible updates to the list of services eligible for E-rate support and the related rules to focus funding on those services that provide high-capacity broadband to school and library buildings and those services and equipment that disseminate the high-capacity broadband within those buildings, while deprioritizing or phasing out support for services associated with legacy technologies and services that have little direct educational application.

66. We recognize that E-rate has historically provided support for voice services, and voice services remain essential for communications and public safety at schools and libraries. However, we also recognize that voice services may increasingly be transitioning to a low-marginal-cost application delivered over broadband platforms. We seek comment on how to approach voice services within this framework.

ENA Comments:

We are in favor of continuing voice service as an eligible service. Any other approach does harm to the local school budget absent the ability to move to another E-Rate eligible voice service. We believe that traditional voice service is primarily migrating to broadband platform VoIP service. However, schools typically still have to connect to the PSTN to serve their stakeholders such as parents. Voice service is an important part of advanced services and has a strong educational purpose. Limiting funds to this communication tool blocks one of the key ways that teachers, administrators, parents and sometimes students communicate on many education related topics.

1. Funding for Broadband Connections

67. *Technological architecture.* We begin by seeking general comment on the most efficient technological architectures that schools and libraries are likely to use for connectivity. Are fiber connections generally the most cost-effective and future-proof way to deliver high-capacity broadband to community anchor institutions like schools and libraries? Are other technologies, such as point-to-point microwave or coaxial cable, which are widely used to provide high-capacity broadband to schools and libraries today, also efficient and cost-effective ways to provide service as bandwidth demands increase?

68. Smaller schools and libraries may not need the bandwidth provided by fiber connectivity and, particularly for small rural and Tribal schools and libraries, fiber connectivity to the school or library may not currently be available in some areas, or requires the payment of very high up-front construction

charges. For these schools and libraries, what are the most cost-effective ways to meet high-capacity broadband needs? Are there fixed wireless solutions that are cost-effective for such schools? Are there some schools where satellite connectivity is the only viable option?

ENA Comments:

There are many ways to deliver effective service to schools. Fiber-based services have become the most popular but other technologies exist or may evolve that are or will be competitive. We recommend that the FCC not force applicants to lock into any one technology but allow the local applicants to evaluate the best that is currently available (which may not be fiber in some cases due to high buildout costs). The FCC can provide the best assistance by evaluating connectivity speed data and cost data from the 471 (if updated as proposed) and determining applicants with below the goal speeds as well as applicants above the cost guidelines. Those two pools of applicants deserve additional attention and help. Neither of these two conditions should be immediately met with a predisposition that the locals are making bad decisions but instead be approached by the FCC as opportunities to meet broadband goals and lower costs by helping those applicants - either through education, tools or other means. Some of the best ways to assist will evolve over time as the FCC balances local control and knowledge with FCC capabilities.

69. How do schools generally purchase connectivity? As an all-inclusive service? Or do schools purchase long-term indefeasible rights of use (IRUs) in physical infrastructure separately from managed services? What approaches are most efficient?

ENA Comments:

Most connectivity is purchased as a recurring service either managed or unmanaged depending on the preference of the applicant and service availability. We have seen very few IRUs used in the schools market. Applicants should continue to be allowed to exercise local control over which method they purchase as long as they are meeting cost guidelines and broadband speed goals. At least initially, there should be plenty of opportunity to improve the program through simple actions to assist the higher cost and lower speed applicants. However, better data collection (initially via Form 471) will not only identify those applicants, but also the volume of applicants that are in each condition.

72. Installation charges for lit and dark fiber are also treated somewhat differently under current rules. Currently, the E-rate program provides priority one support for the installation of lit or dark fiber up to the property line of eligible schools and libraries. It also supports all “special construction charges” for leased lit fiber, but does not support “special construction charges” for leased dark fiber beyond an entity’s property line. Special construction charges include design and engineering costs, project management costs, digging trenches and laying fiber. In order to maximize the options available for schools and libraries seeking to deploy fiber to their premises, we propose to provide priority one support for special construction charges for leased dark fiber, as we do for leased lit fiber.

ENA Comments:

Costs for leased dark fiber including construction costs must be compared with cost standards for reasonableness vs. other options just like any other solution. If a time factor is allowed for construction costs to be amortized during which period the cost is higher than other recurring solutions (based on later savings), the recurring solution must be given a cost reduction over time factor to account for the falling prices of bandwidth as it is likely that the cost of the 100 Mbps fiber leased today will drop 25% to 50% over a 10 year period or upgrade at the same rate to 1 Gbps over a 10 year term.

In addition, lighting equipment should be factored into the cost decision on dark vs. lit including very

expensive cost of 10 Gbps gear, if that is a tipping point. Ability to light the dark fiber at higher than 1 Gbps per school should be a tiebreaker but cannot be a reason for a higher cost solution unless the FCC moves the goal to 10 Gbps per end site.

We recommend that the FCC analyze and determine appropriate total cost over time comparative testing to help applicants determine the right choice. While we do not recommend that the FCC get too involved in the local decision, they should consider offering tools and guidance to school systems to help locals determine which direction is most cost-effective – perhaps including real time guidance during vendor selection if desired by the applicant. The goal should be to minimize any denials related to long-term contracts with high up-front costs. The FCC should consider allowing applicants to select a substitute vendor in the event that the FCC is unable to support a high up-front cost solution.

73. Additionally, although the E-rate program currently provides support for some installation and special construction charges, it requires the cost of large projects to be spread over three years or more.¹¹² The Commission's intent in requiring the cost to be spread over multiple years was to reduce the demand on the fund, but it may have the unintended consequence of deterring efficient investments, including the deployment of fiber. Should we continue to require that large installation and construction costs be spread over multiple years? If so, what should the threshold be for requiring that costs be spread over multiple years? Is three years the right period? Does the answer depend on how many sites are being connected?

ENA Comments:

The ability for the E-Rate Program to shorten any such amortization period depends on the level of funding the program can allocate to such upfront or advance costs. We assert that it is inappropriate to pay such high up-front costs applicable to multiple years instead of needed services to be used in the current year – no matter what the projected long-term cost savings might be. We would recommend that the FCC allow applicants to restructure the terms of their service pricing with their vendor post 471 filing in the event that the program cannot afford a high one-time cost. Revised pricing should be allowed to increase for a reasonable interest cost to cover the change in payment terms.

74. We seek comment on the cost to deploy fiber or other technologies that would provide high-capacity broadband connectivity to schools. We also seek comment on other aspects of support for installation and construction charges. Is there a limit to the amount of funding we should provide to any one library, school or school district over a certain amount of time for construction and installation costs? Are there specific costs that we should or should not fund as part of installation and construction? Are there other approaches we should consider in dealing with high installation and construction costs? We seek comment on whether fiber deployment to schools and libraries being slowed because applicants cannot afford to pay the non-discounted portion of deployment costs. Are there any other conditions we should impose on applicants who seek prioritized support for lit or dark fiber and modulating electronics? Are there ways to cost-effectively deploy fiber and minimize recurring costs to schools and libraries?

ENA Comments:

The idea of moving a large number of school systems to a high upfront, lower long-term owned dark fiber scenario is enticing. However, we believe for a majority of schools it is a pipe dream due to costs and E-Rate funding availability. This option is already available and the costs are extremely high if projected across even a small percentage of America's schools. In addition, it is very likely that the

systems that have adopted a dark fiber build have favorable geographic conditions making a build more feasible. Other areas may have much harder to serve schools, which equates to much higher costs.

In addition, we believe many of the vendors who have offered these services have done so with anticipation of additional local customers using the service and we believe that has not come to fruition in most cases, making future builds likely to have higher cost. We believe dark fiber should be eligible and the changes mentioned in this NPRM to make lit and dark consistent are reasonable, but we do not anticipate a large scale move to such a solution.

We expect that if a separate pool of money is set aside for big build cost and low future cost that almost all providers will be smart enough to take their current costs - factor a big up-front payment and then spread the remaining current costs over the contract - so they can participate in the new pool while still getting the same return over time. Will this create lower pricing? Probably not. It may actually increase pricing if today's costs are projected over a long-term vs. buying a recurring service with several renewal points for price decreases and/or service increases. Dark fiber's main drawing card is 10 Gbps service where it could drive more value, based on today's prices. However, by the time 10 Gbps per site is required for broad deployment, regular lit fiber on a recurring basis will likely catch up in price to the built fiber.

Ultimately, with limited E-Rate funds, it seems inappropriate to pay for multi-year costs for some applicants while current year needs for other applicants go unfunded.

75. We also seek comment on whether prioritizing special construction charges to deploy fiber or other technologies from middle mile networks to schools and libraries (lateral fiber builds) by dedicating a specific amount of E-rate funding to support such deployment would help meet our connectivity goals. Would some prioritization to support lateral fiber builds create long-term cost efficiencies for schools and libraries and for the E-rate program? If so, what should that amount be? Should we encourage or require schools and libraries to enter into long-term IRUs or other long-term arrangements on such lateral builds to get the maximum value of initial investments in fiber? How should we determine the rules of priority for such funding and how much funding should be allocated to each applicant? For example, should funding for fiber builds be distributed based on the poverty level of the students at a school, rurality, location on Tribal lands, lack of fiber or other high-capacity broadband connections to community anchor institutions, or some other objective, observable metric? How much support do we need to provide to make it possible for schools and libraries to apply for such funds, particularly in rural, tribal and other areas where deployment is likely to be expensive? Should we also consider allowing applicants to amortize the costs over a period of time longer than the three years currently required?

ENA Comments:

In our summary comments, we have recommended that broadband including installation costs be considered Priority 1a and other traditional P1 services be Priority 1b. We believe E-Rate should then be neutral on how applicants get broadband - reviewing cost vs. guidelines as the main factor of whether locals are immediately approved or require further review and assistance. There probably needs to be some cap on total one time charges allowed each year across all applicants and a strategy on how to decide allocation based on the demand letter (unlike the current Priority 2 funding system that appears to require a long delay before funding availability can be determined). The demand letter should be able to aggregate Priority 1a, Priority 1a one-time, etc. and determine how much one-time can be funded and what percentage is allocated to each applicant for one time. Applicants should then be allowed to move forward or switch to another method.

As indicated earlier, the use of limited E-Rate funds to support a multi-year purchase over a current year need is a problem with any significant dollars being allocated to one-time costs.

76. Is there a role for the states or Tribal governments to play in determining priority for such funds? For example, should we seek state and Tribal government recommendations for the neediest communities (e.g., low income or schools or libraries without broadband), allowing the Commission to make the final determinations based on the amount of funding set aside for particular schools and libraries for fiber lateral builds? We specifically seek comment on any other factors to determine priority of funding for fiber lateral builds. We also seek comment on any potential requirements for receipt of specific support for fiber lateral builds. Should we, for example, require community access to high- capacity broadband facilities in exchange for such funding? We ask commenters to be as specific as possible in response to these questions.

ENA Comments:

States already have a large E-Rate role with state contracts and consortia in many states. 471 filings led by states are an option that states can elect if they desire more control. Creating an additional level of review and involvement by inserting state government into the process seems unlikely to contribute to streamlining the program or to advance program goals.

Community access is likely a non-issue. Vendors who are in the area will likely be attempting to sell to all customers to be able to bid a cost-effective solution. Vendors like ENA will be successful only if we are buying from last mile providers who have multiple customers on their middle mile networks.

Ultimately, all of this should be decided by review of cost per megabit per second or similar metric regardless of how it is purchased or from whom. If an additional determination of who deserves to receive limited one-time funds is required, perhaps the decision can be based on the cost per unit rather than some arbitrary factor. That method would assure that the FCC was getting the most from the limited funds.

77. If we prioritize some funding for new high-capacity broadband deployment should we be technology neutral or should we prioritize fiber connectivity over other types of broadband connectivity? Should we give schools flexibility to select the best technology that meets their needs? As discussed above there may be some schools and libraries, particularly small rural schools and libraries, where fiber deployment is either not necessary or simply cost-prohibitive.¹¹⁶ How should we address the needs of schools and libraries in areas where fiber is far less likely to be offered or available, such as Tribal lands? Are there other solutions such as fixed wireless or cable solutions that would be sufficient today or in the future for meeting such schools' and libraries' high-capacity broadband needs? Are there deployment costs associated with any of those technologies that should be supported by the E-rate program?

ENA Comments:

We believe the FCC should always be technology neutral - reviewing the cost result and not how it will be delivered or who will deliver it. Local school districts should be given flexibility to select the best technology that fits their needs and the FCC should review to make sure they did not spend outside of cost guidelines or find out why. Ultimately, for the program to be most valuable, the FCC should find ways to support applicants and provide ways for them to improve their costs, networks, etc. without being intrusive. Cost and speed measurements should be the indicators to the FCC of when to focus on certain districts (for example – the FCC should gather more information on a district that requests twice the expected cost ranges for broadband service - determining why and whether there are ways to help the

district improve) For example – the FCC should note that a district still has average speed of 10 Mbps and inquire to determine why and what FCC can do to help improve cost/availability of 100 Mbps for that area (if desired by the school district)). This type of partner mentality vs. a funding cop mentality will lift the program to higher levels of success.

78. If we seek to spur fiber or other broadband deployments through dedicated funding, are there associated changes we should make in how we fund the recurring costs for telecommunications and Internet access services, which are also priority one services today? For example, should we fund broadband deployment upgrades before recurring costs, creating a further prioritization within existing priority one services? Should we consider providing a different discount rate for ongoing services than for initial fiber upgrades? Would this approach encourage schools and libraries to enter more efficient long-term service arrangements as part of new infrastructure investments?

ENA Comments:

We are in favor of prioritizing broadband - both construction and recurring - old and new - in a bucket ahead of other Priority 1 services. We are not in favor of prioritizing construction ahead of all other services. One reason is that this potentially penalizes the first movers who already have long-term contracts at reasonable rates for 100 Mbps to 1 Gbps fiber services. To encourage a run on the E-Rate bank for new construction and not fund recurring services already in place would be grossly unfair to those entities. In addition, such a priority system is not technology neutral and we believe it is in the best interest of the program for the FCC to remain technology neutral in this matter. To further comment on this paragraph, the FCC should not offer a better discount on initial upgrades vs. ongoing service. How would that be a fair allocation of funding? The FCC should commend districts that have already met the goals in a cost-effective manner - not design ways to take their money away to give it to some new way to provide initial fiber upgrades. Past E-rate success and higher per student rates are not reasons to reduce someone's funding. Only high cost or over-purchasing (like buying 10 Gbps vs. 1 Gbps max for an end site) should be considered as reasons to reduce funding to an entity in a disproportionate manner. We believe that high cost testing may identify some significant savings.

We also disagree with the characterization that long-term service arrangements are necessarily more efficient than use of recurring services. We strongly believe that if recurring service providers were given an equal opportunity to bid on a 10 to 20 year contract for 1 Gbps service that such bids would be competitive with high up-front cost bids – including providing ongoing rates beyond the initial contract that are competitive with maintenance contracts for owned fiber – especially as that fiber and the related equipment continues to age. We implore the FCC to be very careful not to assume that there are limited future costs with owned fiber without significant data to support that assertion.

We further assert that taking ownership of fiber as a long-term asset could create an inability for schools to take advantage of new technologies and lock schools into potentially high cost fiber and equipment maintenance/replacement costs.

83. Broadband connectivity within schools and libraries. We also seek comment on options to support connectivity within schools and libraries. In recent years, the E-rate program has been unable to fund billions of dollars in requests from applicants seeking support for internal connections. For example, in funding year 2012, USAC received approximately \$2.47 billion in funding requests for internal connections, and was unable to fund any requests below the 88 percent discount rate.¹²³ As a result, many E-rate recipients have not received support for internal connections, and must provide full funding for needed internal connections or go without. We seek comment on the percent of schools and libraries that do not have the necessary equipment to provide high-capacity broadband connectivity within

schools, and the amount it would cost to provide high-capacity broadband connectivity within such schools and libraries. We invite commenters to be as specific as possible and to provide any data they have available on this issue.

84. More broadly, we request that commenters provide data on the nature of internal networks generally deployed within schools and libraries today and the likely needs of schools and libraries going forward. Previously in this section, we asked for information about the most efficient and cost effective network architectures for deployment of high-capacity broadband. Similarly, we ask for detailed information about internal network configurations. Will school networks generally consist of wired connections between classrooms and high-capacity wireless routers in each classroom? Do schools generally have internal high-capacity wired connections to each classroom today? If so, should we focus funding on newer high-capacity wireless routers, which are needed to allow multiple simultaneous high-capacity connections in a classroom environment?

ENA Comments:

We believe funding for internal connections from Internet access point to classroom - wired and/or wireless - including necessary equipment along the path such as switches, firewalls, etc. – should be eligible as Priority 1b (as defined in our recommendations summary). We assert that schools should be able to acquire such connectivity via purchase, lease or managed service at their discretion with cost testing during the approval process vs. a guideline per student served. The FCC should allow local districts to determine the equipment, providers and configuration they desire without undue influence or restriction. The FCC should consider offering generic best practices information to help schools and libraries understand the various options and network configurations currently available.

It has been our experience that limitations in infrastructure from the Internet access point to the classroom such as undersized switches, firewalls, caches and filters are likely to limit access to broadband. That is, a community may have 1 Gbps available at a reasonable price but not have equipment in the line of Internet access at the school that can support using more than 100 Mbps of such access.

85. Are there other equipment or services necessary for high-capacity broadband connections that should qualify for prioritized support? For example, which of the internal connection services listed as priority two services on the current ESL are necessary for providing high-capacity broadband connectivity within schools or libraries?¹²⁴ What services not on the ESL should we consider supporting? Should we, for example, consider providing support for caching services or for services necessary for providing network security for schools and libraries? Is there evidence that outdated networking equipment (firewalls, content filters, etc.) creates significant speed bottlenecks on school and library networks? Is adding these types of services to the list of supported services, so that schools and libraries have the funding necessary to update those services, needed to eliminate significant speed bottlenecks? Are there any services not currently receiving support that would allow more cost effective use of E-rate funds?

ENA Comments:

Items to consider as part of Priority 1b - wireless routers, access points and controllers, switches and related wiring. Caching services should be returned to eligible as they can reduce the bandwidth required by eliminating duplicate Internet requests. Firewalls are an important part of network security and bandwidth management - they should also be eligible (and cost tested) as a purchase or a service as part of the ISP service. Language indicating that separately priced firewalls are ineligible is confusing and should be removed. The definition of basic firewall service needs to be revealed or that term needs to be

stricken. Additional protection services such as Intrusion Detection and similar could be on the ESL as Priority 2. (P2 could be for both certain services and certain equipment).

Content filtering service should be made E-Rate eligible; it has become a low cost service but it can be a control of bandwidth if deployed as part of a comprehensive service. Filtering stops inappropriate traffic from using up bandwidth.

The FCC should also specifically allow low cost bandwidth management solutions to be eligible such as Quality of Service, Traffic Management and Traffic Prioritization. These solutions allow for bandwidth to be prioritized to key needs. For example, bandwidth for high stakes testing could be optimized ahead of general web surfing - making sure that someone watching a video in the library would not prevent a test due to limited bandwidth.

We also recommend that e-mail virus and SPAM filtering services be provided E-Rate funding. These services are necessary to make sure that bandwidth can be utilized efficiently and should be encouraged by the FCC with cost testing to identify outliers. For example, the FCC should support an applicant that uses bandwidth, caching, firewall, filtering and QOS and the combined cost is no more than the cost standard for the equivalent level of bandwidth without these tools - allowing for some level of bandwidth being "provided" by the additional tools (for example, caching might be worth 10% more bandwidth - so 90 Mbps bandwidth + caching might be compared to the cost of 100 Mbps bandwidth during approval testing, if needed to justify the cost)

86. In 2001, the Commission prohibited E-rate recipients from obtaining discounts under the universal service support mechanism for the purchase or acquisition of technology protection measures necessary for the Children's Internet Protection Act (CIPA) compliance.¹²⁵ At the time of the *2001 CIPA Order*, protection delivered at the network level was in its nascent stages and now schools and libraries need to employ network-level protection more ubiquitously. Should the 2001 decision to prohibit schools and libraries from receiving E-rate discounts for technology protection measures apply to the broad spectrum of services schools and libraries employ for network security which may include, or go beyond those protections necessary for CIPA compliance, in order to maintain and protect high-capacity broadband networks? We seek comment on whether we should review the *2001 CIPA Order* decision in light of the network security needs of schools and libraries today.

ENA Comments:

Elimination of funding for network security results in applicants either forced to use an unsecure network, inability to actually use the bandwidth purchase due to capacity limitations in locally owned network security equipment or a lower quality level of security. Either way, it is likely that such a network needs more bandwidth to function than a properly secured network. Network security can be a proxy for more bandwidth and a cost-effective advanced technology. It should not be lumped in with a technology protection measure that is tasked with preventing pornography. We also disagree with the decision to not offer E-Rate for filtering as high quality filtering also helps manage bandwidth by limiting inappropriate traffic and poor quality filtering may be a bottleneck for bandwidth speed. Cost testing during approval can help make sure that no inappropriate high price services get through the process and funded by being described inadequately.

87. Are there any other rule changes needed to ensure schools and libraries can effectively use high-capacity connections to their premises? What other steps can we take to spur efficient new high-capacity broadband deployment within schools and libraries.

ENA Comments:

Revise the rule that classifies bandwidth between buildings on a contiguous campus as a Priority 2 service - the current rule encourages direct connections to each building on a contiguous campus vs. potentially less expensive fiber connections between buildings - these should be in Priority 1a or the same as other connectivity related services.

88. *Recurring costs.* We also seek comment on the recurring costs of high-capacity broadband services. As schools and libraries have been increasingly purchasing high-bandwidth connections, how have their recurring monthly costs changed? We anticipate that in order to meet our proposed connectivity goals, the average recurring per-megabit prices of connectivity purchased by schools will need to come down substantially. Fortunately, there is precedent for significant price reductions associated with infrastructure upgrades. For example, the Commission's Rural Health Care Pilot Program showed that bulk buying through consortia coupled with competitive bidding can reduce the prices that recipients pay for services and infrastructure.

ENA Comments:

Bandwidth costs have dropped substantially per megabit per second over the life of the program. However, it is not possible for price decreases to keep up entirely with bandwidth demand. Therefore we see the Priority 1 request increases that we believe are coming from higher bandwidth being deployed. To put this in perspective, bandwidth has increased on average from 128 kbps in 1998 to at least 10 Mbps in 2013 (and that is understated). That would be a 77x increase. Cost for Priority 1 has at most doubled during that same period. In addition, the number of program participants has dramatically increased. These factors demonstrate a very significant increase in bandwidth availability per dollar spent by the program, but not enough to indicate that the program can move to 1 Gbps and also reduce total cost needed for Priority 1.

We are seeing price decreases and significant competition in all markets. We do not believe the system today has a general problem with getting reasonable pricing. The cost testing suggested should help verify this and identify the outliers. We will likely see the reality of certain areas with very high cost and a majority of areas with reasonable costs.

89. How can we ensure that recurring costs come down sufficiently over time within the E-rate program to make our proposed connectivity goals achievable and sustainable? Are the program's existing matching and competitive bidding requirements sufficient safeguards, or are further steps required? For example, should we phase in maximum per-megabit prices over time that are eligible for E-rate discounts, or set program-wide per-megabit price guidelines or targets? Would such prices give schools and libraries greater leverage in soliciting bids from vendors, or simply limit the choices available to schools and libraries? What should such prices be? If we set maximum per-megabit prices, should we allow exceptions in certain circumstances? What impact would such price guidelines or targets have on schools or libraries in areas that lack competition for high-capacity broadband, such as Tribal lands?

How would such prices account for differences between more and less heavily-managed services? We seek comment on other options. Below, we also seek comment on how to maximize cost-efficient purchasing. Will these approaches ensure cost-effective purchasing of recurring services?

ENA Comments:

We believe prices will continue to drop and help the program overall need (but not fix all of the need). We recommend that per megabit per second cost guidelines be developed and used in automated approval testing to identify outliers that need specific testing. The per megabit per second prices

should be guidelines to determine where more discovery is needed and not maximums that create denials. That specific testing and discussion will identify areas for the FCC to focus on to help districts generate more savings or find more vendors to choose from. The per Mbps pricing may need to be set on a state or regional basis given the variation in cost of build and therefore pricing seen between different areas of the country.

2. Phasing Down Support for Certain Services

a. Specific Services for Which Support May No Longer Be Appropriate

92. *Outdated services.* We first propose to phase out funding for those services that are outdated. For example, paging services are eligible for support because in 1998, the first year of E-rate funding, the adoption of mobile phones was not yet widespread and pagers filled the role of common personal and mobile communications. Paging services have grown increasingly obsolete with the advent and explosive growth of mobile technology and services, many of which are also supported by the E-rate program. Yet, paging services continue to be eligible for E-rate support, and in funding year 2011, USAC committed approximately \$934,000 for paging services for more than 500 E-rate requests.

93. Likewise, directory assistance services are eligible for support because, in 1997, directory assistance was considered a core service. Now, however, Internet search has largely replaced directory services. We, therefore, seek comment on our proposal to phase out E-rate support for paging services and directory assistance.

94. Do either paging services or directory assistance service serve any important educational purposes? Is it in the public interest to continue to provide support for either paging services or directory assistance? Are there any other services that are similarly outdated and should no longer be eligible for E-rate support? For example, is there any reason to continue to provide support for dial-up services? In funding year 2011, there were more than 100 requests for approximately \$95,000 in funding commitments for dial-up services. Is that still necessary today? Are there any schools or libraries that have no other option for accessing the Internet besides dial up services?

95. *Components of voice service and supplemental services.* We also propose to phase out funding for services that are simply components of voice service as well as those services, other than voice, that ride over or are supplemental to high-capacity broadband connections but are not necessary to make a broadband service functional.¹³⁴ More specifically, we first propose to eliminate support for custom calling features, inside wiring maintenance plans, call blocking, 800 number services, and text messaging as components of voice services that may not serve educational purposes and do not further our proposed goals. USAC has estimated that it committed more than \$85,000 for 800 number service in funding year 2011 and more than \$75,000 for unbundled text messaging in funding year 2011. We seek comment on this proposal and we ask whether there are other such services for which we should no longer provide E-rate support?

ENA Comments:

Dial-up represents a small dollar amount - since it appears to be unknown whether these 100 requests represent schools or libraries with no other option - it seems worthy of specific review instead of arbitrary elimination of existing service.

Custom calling features - this should be delineated more clearly as the term is too vague to discuss. Are these only ineligible if they have a separate cost? Some voice services just include a list of standard features - we recommend that the FCC would consider those acceptable unless cost testing indicates higher than expected cost due to custom features. Otherwise this will create an ongoing voice

administrative nightmare during PIA with no major value to the program.

800 number service - removal of this service would create hardships in rural communities that have two different telephone LATAs. The 800 number service is typically made available so all parents can call a school without paying long distance.

Text messaging - almost every student prefers text messaging to communicate and it has become a very normal method of quick communication. E-Rate should support this key method of "advanced" communications.

The dollars expended for 800 number service and text messaging seem to be minimal and therefore not really worthy of detailed discussion. However, they may be material to those districts that need those services - we don't have enough data to know, and should not therefore be eliminated as eligible services without specific review of individual situations.

97. Based on the concept articulated in the *Healthcare Connect Fund Order*, we seek comment on phasing out E-rate support for services that are not directly related to connectivity and seek comment on this proposal, such as electronic mail services (e-mail) service and web hosting as supplemental services. In previous proceedings, commenters have claimed that the pricing of web hosting in the K-12 market has become skewed when compared to other commercially available web hosting services and claim that vendors have become adept at packaging their services to increase the cost of web hosting above market rates in order to decrease the cost of the ineligible services. USAC estimates that it committed \$9.8 million for e-mail services and almost \$28 million for web hosting in funding year 2011. Should the E-rate fund be supporting services such as web hosting and email at costly monthly rates when many such services are cloud based and offered basically for free to other users? Is there any continuing and compelling policy reason to continue to fund such services?

98. We note that "electronic mail services" are included with in the definition of "Internet access" in section 54.5 of our rules and we therefore seek comment on whether we would need to change the definition of "Internet access" for purposes of the E-rate program if we were to stop providing support for e-mail services. If so, should we simply delete the reference to electronic mail services in the definition of Internet access in section 54.5 of our rules? Are there are other changes we need to make to our rules if we phase down or eliminate support for the types of services discussed above? Are other services that are currently eligible for E-rate support that ride over or are supplemental to high-capacity broadband connections, but are not necessary to make a high-capacity broadband service functional?

ENA Comments:

We disagree with the removal of e-mail. E-Mail is certainly an advanced solution supporting teacher to parent and teacher to student communication. We see dramatic usage of e-mail to communicate assignments, updates and other key information with students. We believe it should continue to be eligible and cost guidelines put in place to verify no unusually high costs.

99. *Educational purposes.* In the *Schools and Libraries Second Report and Order*, the Commission determined that activities 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." The *Schools and Libraries Second Report and Order* also, however, provided a presumption that services provided on-campus serve an educational purpose. More recently, the Commission clarified educational purposes in *Schools and Libraries Sixth Report and Order* by requiring that schools must primarily use services funded under the E-rate program, in the first instance, for educational purposes.

100. We seek comment on whether we should make changes to the E-rate program to ensure that supported services are, at a minimum, used for the core purpose of educating students and serving library patrons.¹⁴⁴ More specifically, we seek comment on whether we should allow a school or library to seek E-rate support for services that will be used only by school and library staff, administrators, or board members. If school and library staff use the supported services in their role as educators and information providers but the services are inaccessible to students and library patrons, does this satisfy the statutory requirement that the support be used for educational purposes in 254(h)(1)(B) and that advanced telecommunications be enhanced for all classrooms and libraries in 254(h)(2)(A)?¹⁴⁵ Should E-rate funds be provided if school and library staff use such services only for administrative or other purposes not directly tied to education? If funds are provided for administrative or other purposes not directly tied to education, should they have a lower priority than funds provided for the core purpose of serving students and library patrons? Alternatively or additionally, should we stop providing E-rate support for services to non-instructional buildings, such as bus garages? If so, how should we treat non-instructional buildings, such as technology centers, that support E-rate supported services? Are there some administrative functions such as parent-teacher communication that should always be considered as primarily serving an educational purpose? Or, even if there are services that further the educational mission of the school, is it now no longer realistic to support all of these services within our budget since funding is always limited? We invite commenters to distinguish between and among E-rate supported services when responding to these questions. For example, do commenters think we should take a different approach when it comes to Internet access services as opposed to basic voice services? What changes to the E-rate program would be necessary, such as changes to our rules or required program certifications, if we were to limit E-rate funding to services directly available, at least in part, to students and patrons?¹⁴⁶ Would placing limits on funding for services that are not directly available to students or patrons be too difficult to monitor or audit or raise cost-allocation challenges? Commenters should be specific in their proposals.

ENA Comments:

We are not in favor of restricting service in the manner suggested by this paragraph. We believe that the educational purpose definition currently in place is optimal and that teacher and administrator use of bandwidth does support classroom and students whether or not some of that effort is not directly interacting with the student. Overall cost testing will identify if districts are overspending in this area to the point that they are too expensive. The cost of trying to determine whether such connectivity has partial direct student interaction is not worth the savings such testing might generate. We need teachers and administrators to have access to cell phones and other tools to make sure all avenues of communication are open with students and parents to facilitate the new on-line and digital communication world. Removing a component of the cell/text/email/Internet option seems like a bad move if we are attempting to allow advanced communications.

We would also consider school buses to be school premises and believe a low cost and valuable advanced solution to add to the ESL would be wireless access on school buses enabling kids to do more school work during their commute. If we are considering Wi-Fi hotspots as is noted later in this NPRM, it seems we should allow school buses to be connected.

102. *Cellular data plans and air cards.* We also seek comment on how to treat support for Internet access services provided via cellular data plans, including air cards. Such services are costly, and can be provided more efficiently on-campus via an E-rate supported local area (LAN) network that connects to the Internet. Should we phase out support for cellular data plans and air cards or should we instead deprioritize support for such services?

ENA Comments:

Cellular data plans and air cards - to be eligible, they must be compared to on-premise solutions (whether or not they are E-Rate eligible - although we are recommending E-Rate parity). If they are still selected (likely due to the mobility of taking the access home), we recommend that cost allocation for the air card/cellular solution include 100% of the cost difference between the on-premise solution and the air card solution as the school system likely only paid the difference to take the device home. School systems should have the opportunity to present information supporting a different cost allocation as part of the review process.

b. Tightly Focusing the Eligible Service List

103. In addition to the specific services identified above, we seek comment on whether we should more fundamentally shift the way we prioritize E-rate support to emphasize and accelerate high-capacity broadband connectivity to and within schools and libraries. In particular, we seek comment on whether we should seek to identify the services currently on the ESL – plus any additional services – that are essential for high-capacity broadband connectivity, and limit the ESL to just those services. What services, in addition to those identified above, should we remove from eligibility under this approach? Would taking this approach help ensure that schools and libraries have the bandwidth necessary to support digital learning?

104. SECA's recent proposal to streamline priority two services is one example of such an approach. SECA recommends that the priority two ESL be "redefined to focus on ensuring that the transmission of bandwidth inside the building is sufficient, and all other functionality should no longer be eligible for support." It therefore suggests that priority two eligible services should be limited to routers, up to one per building; wireless access points, up to one per classroom for schools; and internal cabling, up to three cabling drops per classroom for schools. We seek comment on SECA's proposal, as well as on variations and alternatives.

ENA Comments:

We believe these recommendations in 103 and 104 should not be implemented or at least deferred. We believe that gathering more data by making sure that the 471 asks for specific information regarding broadband levels will provide more valid data on cost and needs than we have currently. Furthermore, we believe that the local budget impact of removing E-Rate funding from critical currently supported services would have an impact on the speed to broadband compliance by creating less local money to pay the match for broadband service (for example, if voice is ineligible but still needed by a school district, the school district local budget will have to pay more for voice. If that budget is effectively fixed, that means less dollars to pay local match for broadband - perhaps contributing to lower broadband adoption not higher.) The FCC should be wary of options that harm the local budget.

c. Transitioning Voice Support to Broadband

105. We also seek comment on phasing out services that are used only for voice communications. At the inception of the E-rate program, one of the primary ways to access the Internet was through voice telephone lines that delivered dial-up service via a 56 kbps modem. Today, widespread deployment of faster-speed technology has permitted schools and libraries to have access to high-capacity broadband connections that permit many types of digital learning technologies. We ask whether focusing on the transport of broadband and transitioning away from voice services would better serve the proposed priorities of the program.

106. In funding year 2011, there were more than 37,000 requests for local and long distance telephone service, amounting to approximately \$260 million in funding commitments. While, for funding year 2011, USAC estimates that it committed close to an additional \$176 million for cellular services. We seek comments on whether this funding would have greater impact for students and library patrons if it were transitioned to support broadband for schools and libraries.

107. SECA's June 2013 White Paper recommends that telecommunications services that are used only for voice communications should be phased out of E-rate support because such services are not used to provide advanced telecommunications or information services to schools or libraries. It suggests, however, that telecommunications services used for both data and voice telecommunications services should continue to be fully eligible for E-rate without requiring any cost allocation. SECA specifically proposes a tiered phase out of funding for all basic phone service over a five-year period to allow 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. We seek comment on SECA's plan for phasing out E-rate support for basic voice telecommunications. Would the savings resulting from the phase out of funding for basic voice be better spent on high-capacity broadband that supports digital learning? Would the phase out of voice services give more E-rate applicants the opportunity to have internal connections project funded under the program?

108. We ask about the potential hardship schools and libraries would face if voice phone service was phased out under the E-rate program. As we noted in the E-rate Broadband NPRM, we recognize that local, state and Tribal jurisdictions around the country are facing economic difficulties and budget tightening. At the same time, we seek comment on the extent to which E-rate support for voice service serves to provide schools and libraries access to services they would not otherwise be able to afford, or simply subsidizes voice telephone service that schools and libraries would purchase anyway, including voice services schools across the country may have been paying for in full before the inception of the E-rate program.

109. Should the Commission consider subsidizing more cost-effective ways to make local and long-distance calls? Does Voice over Internet Protocol (VoIP) service provide a viable alternative to public-switch telephone service? Has the advent of increased broadband speeds in schools and libraries made VoIP service a more cost-efficient and attractive way to receive voice services? How should our rules accommodate the needs of schools and libraries in areas without VoIP services, including some Tribal lands? Or should the Commission also phase out funding for all voice services, including VoIP service?

110. We seek comment on whether there are any statutory limitations that must be considered in eliminating voice telephone service from the ESL. To the extent there are legal concerns with removal of voice telephony service from the ESL, could we condition support for voice telephony service in a way that would eliminate stand-alone support for voice telephony service but allow it for bundles that include broadband service? Could the Commission forbear from applying the obligation on telecommunications carriers to discount their voice telephony service, thus eliminating the need for such reimbursement?

ENA Comments:

The premise of this section seems to assume that school systems will not be negatively impacted by the withdrawal of funding from existing programs such as voice. On the contrary, if voice service is eliminated, schools will be paying more out of the fixed local technology budget for voice and likely therefore, limited in

the amount of E-Rate supported broadband that they can buy. The elimination of voice eligibility effectively lowers the likelihood that broadband is adopted. Other measures could be employed to measure whether voice service is too costly or whether school systems should deploy VoIP services instead of traditional telephony.

We further believe that other reforms of program administration including better review of high cost applicants, speedier processing of approvals, clean-up of appeal backlog, etc. should be completed before such drastic measures are employed.

We are unclear whether or not the FCC is in favor of elimination of funding for VOIP based on these comments, but we strongly disagree with any such elimination of service. We discussed the reasons why voice and especially VoIP should be considered a valued, advanced service for schools and that applies here as well. In addition, there are certain services that do not currently function over VoIP that should continue to be eligible such as most analog fax services and alarm lines.

d. General Issues Related to Phasing out Support

112. Alternatively, should we consider maintaining support for some or all of these services, but at a lower priority than the funding of high-capacity broadband services? Or, as another alternative to phasing out funding for the services described above, should we consider reducing the percentage of support we provide for those services? If so, what percentage of support would be appropriate?

ENA Comments:

We support for the short-term creating a Priority 1a for Broadband and Priority 1b for other existing and recommended new Priority 1 services. This would ensure that broadband received money first and would still likely have funds available to fund necessary non-broadband services that are needed by schools. See response to Para 146 - 148 for additional details.

2. Support Based on District-Wide Eligibility and Application by School District

128. In the *E-rate Broadband NPRM*, the Commission sought comment on a proposal to revise the discount rules so that schools would calculate discounts on supported services by using the average discount rate for the entire school district rather than the weighted average for each school building. As the Commission observed in the *E-rate Broadband NPRM*, calculating discounts by individual school adds a significant level of complexity to the application process, because the discounts must be calculated separately by school and checked individually by USAC. Simplifying the discount percentage rate calculation across a school district could streamline the application process for school districts and reduce the administrative burden on USAC by no longer requiring USAC to verify each individual school's discount percentage rate. We also anticipate that applying one discount rate to all eligible schools in a school district could lead to more timely funding commitments from USAC. Additionally, the Commission stated that it could significantly reduce the amount of information necessary for Block 4 of the FCC Form 471 application and eliminate a billed entity's submission of multiple FCC Form 471 applications at different discount levels. Moreover, SECA argues that calculating discounts on a district-wide basis better reflects schools' financial realities: tax bases are calculated on an entire district population, not just those of a subset of schools, and budgets are set district-wide. Allowing libraries located within a school district to use the school district's discount rate would also ease the administrative burden of such libraries.

129. Accordingly, we propose to revise section 54.505(b) of the E-rate rules to read:

*School districts shall calculate discounts on supported services described in § 54.502(b) by calculating a single discount percentage rate for the entire school district by dividing the total number of students eligible for the National School Lunch Program within the school district by the total number of students within the school district. This single discount percentage rate shall then be applied to the discount matrix to set a discount rate for the supported services purchased by all schools within the school district.*¹⁸⁹

We seek comment on this proposed rule. We also seek comment on whether we should define “school district” for purposes of this proposal.

131. Additionally, in the *E-rate Broadband NPRM*, as part of its efforts to streamline the application process, the Commission sought comment on a proposal to require all schools and libraries that are part of the same school district to submit applications for priority two internal connections by school district, rather than by individual school.¹⁹² As the Commission stated in the *E-rate Broadband NPRM*, requiring schools to apply by school district would help streamline the process and simplify the discount calculation for schools as well as the review process for both applicants and USAC.¹⁹³

Additionally, it would ensure that libraries receive funding for internal connections and at the same discount level as schools located within their school district.¹⁹⁴ We thus seek comment on amending section 54.504(a) of the E-rate rules to read:

An eligible school, library, or consortium that includes an eligible school or library seeking to receive discounts for eligible services under this subpart, shall, upon signing a contract for eligible services, submit a completed FCC Form 471 to the Administrator. All schools and libraries that are part of the same school district and seek priority two internal connections shall submit a completed FCC Form 471 to the Administrator as part of the school district in which they are located. A commitment of support is contingent upon the filing of an FCC Form 471.

We seek comment on this proposed rule.

ENA Comments:

We strongly support the district-based discount percentage including simplifying the calculation as recommended by SECA (items 128-129). We further strongly support the district-based discount rate percentage be used for Priority 2 - ie no single school applications for Priority 2 (item 131). This treatment should allow Priority 2 to be provided (if available) based on need of the district as a whole - which we assert is the proper entity for this measure.

As a side effect of using a district-based discount percentage, the rural versus urban designation needs to be eliminated for both simplicity of the district discount percentage calculation and elimination of a misunderstood benefit for rural schools. Since many districts have both rural and urban schools, the assignment of rural or urban for the district is an additional complexity that we would recommend eliminating.

Even more importantly, the rural designation is designed to provide additional assistance to the neediest rural schools. However, since the urban and rural schools receive the same discounts at the 80% and 90% levels, the rural benefit is only assisting effectively the “middle class” and “upper class” rural schools who would be at the 20%, 40%, 50% or 60% discount level, except for the rural benefit. Therefore, since this additional discount does not impact the neediest rural schools, we recommend

that it should be eliminated.

132. We also seek comment on whether we should require schools and libraries to submit applications for priority one services by school district. Commenters should address what, if any, additional burden such proposal may place on applicants. In addition, we seek comment on whether to limit applications for a school district to one for each category of service requested. For example, if the Commission retains the current priority one and priority two distinctions, an applicant could only submit two applications – one for each category. What are the advantages and disadvantages of such a requirement?

ENA Comments:

We discourage making this a rule. There are many good reasons why applicants may file more than one Form 471. One reason could be the different timing of procurements and contracting for different eligible services. Applicants should not be forced to wait to complete all of their 471 filings because one service is still pending vendor selection/contracting.

An alternative solution could allow FRNs to be added to a Form 471 during the filing window with the submission date per FRN versus per 471. However, this process may be beyond current USAC system capabilities and, if so, should be considered at a later date after other key reforms are implemented.

4. Setting Budgets or Limits

135. In this section, we seek comment on whether we should impose a per-student or per-building budget, or similar limits, on funding for schools and libraries. Building on a recommendation of the 2003 USAC Task Force, Funds for Learning, an E-rate consultant that has analyzed USAC's data, has argued that appropriately-structured budgets on a per-student or per-building basis could lead to more equitable and predictable distribution of E-rate funds by limiting the funding that is allocated to a small number of high-spending applicants. According to Funds for Learning, 2012 funding requests averaged \$44.30 per-student for priority one services across all applicants, but more than 10 percent of applicants sought funding of at least \$180 per-student for priority one services. Notably, four school districts in the nation's largest cities requested at least \$240 per-student, and more than a dozen other applicants sought over \$1,000 per student in total support in funding year 2012.

136. Some variation in funding is not surprising because discount rates range from 90 percent to 20 percent. Moreover, the Commission has always recognized that schools and libraries across the country would have different needs and different challenges in purchasing E-rate supported services.

Yet the Funds for Learning analysis of funding year 2013 requests shows that applicants with higher discount rates also planned to spend significantly more per-student in pre-discount dollars for telecommunications and Internet access (priority one services). Those seeking 20-59 percent discounts plan \$35.23 per-student in pre-discount purchases of priority one services, while those seeking 60-79 percent discounts plan \$43.02 per-student pre-discount purchases for such services, and those seeking 80- 90 percent discounts, \$86.53 per-student pre-discount purchases for such services. We also expect that a small rural school may have to pay more per-student for Internet access than a large urban school.

However, Funds for Learning finds that some of the highest per-student costs are in urban areas, where competition should drive down prices. While the 2,360 applicants in large cities plan an average of

\$67.88 per-student in pre-discount purchases for priority one services for funding year 2013, the 4,987 applicants in large, medium, and small-size suburban schools plan per-student purchases of priority one services averaging only \$40.76, \$39.17, and \$46.44 in pre-discount prices, respectively. Even the 3,129 applicants in “rural: distant” areas planned pre-discount purchases averaging only \$65.35 per-student.

ENA Comments:

Numerous cost per student statistics are provided in the previous paragraphs. However, this information is presented without data on the services and specifically the bandwidth speeds purchased. We encourage the FCC to be very careful in drawing conclusions based on such statistics. Instead, we encourage the path we have discussed in our summary. Specifically, the FCC should require Form 471 Block 2 (or Block 5 under the 471 NPRM) to be completed with relevant information on connectivity speeds and other key data to enable a cost per bandwidth unit to be computed. For broadband, that should be the applicable metric.

138. Having considered the record on that proposal, we now seek comment on whether we should consider a higher and more flexible per-student limit, per-building limit or alternative forms of limits or budget on an applicant’s E-rate funding. If we adopt a per-student limit or other form of limit for some or all services, we seek comment on where we might set the limit. Should any limits we adopt include adjustments to reflect the higher costs faced by applicants in more expensive-to-serve locations, such as Tribal lands? Should any such adjustment be based on observed current costs, some relatively simple and reliable proxies for costs, or some other measure? Should limits be set relatively high, so as to serve as a check on excessive funding requests and help prevent a few applicants from securing so much funding that other disadvantaged applicants are crowded out, while leaving most applicants unaffected? Alternatively, should limits be set lower to more aggressively spread funding annually to disadvantaged applicants that have rarely, if ever, received funding for internal connections?

139. We invite commenters to propose limits for either total annual funding, pre-discount requests, or for priority one and priority two purchases separately and ask commenters to explain their rationale for the limits that they recommend. We seek particular comment on Funds for Learning’s most recent proposal calling for a per-student budget calculation. We note that we have sought comment on prioritizing broadband connectivity to and within schools and libraries, which could, among other changes, raise the per student cost of supported services for those schools and libraries seeking support for large installation and construction costs. How do we implement this prioritization of broadband connectivity while also instituting any of the potential funding limits? Should we consider excluding some costs from the limit, such as non-recurring installation and construction costs? Should we instead impose some other cap on costs related to the higher priority services?

ENA Comments:

In this area we strongly support the comment in paragraph 138 "Should we set limits relatively high so as to serve as a check on excessive funding requests...leaving most applicants unaffected" - we believe that is the cornerstone to all initial program reforms - this needs to be done along with sampling and better data collection to clean up current low hanging fruit (districts getting dramatically more than their share, high cost areas that are indicative of need for help, etc.). We believe a year of the new reforms could provide information needed to tighten up the limits and continuously improve the program - eliminating outliers and speeding funds to applicants - each of which will add usable funds to the program and help toward the broadband goals. In paragraph 139, the existence of significant one-time costs will likely require manual review to determine if the long-term benefit is supportable. We recommend that entities be allowed to have two potential solutions – on-going and the one-time build - even if that is two different providers - developed and filed in the event that E-Rate cannot afford the one-time cost. If there

is a desire to incorporate a large one-time program, specific work will need to be done on 471 reporting and measurements to identify that scenario and make the right funding awards. The ability to delay the contract assignment until funding is awarded is a key proponent of how this needs to work - or at least the allowance of a non-E-Rate funding termination option.

Given the apparent shortfall of funding versus need, it is currently not advisable to move to a per student allocation or hard cap, as such a program is likely to disadvantage those that have attempted to meet program bandwidth recommendations and as a result likely have a higher than average cost per student due to higher services being received.

5. More Equitable Access to Funding for Internal Broadband Connections

146. *Eliminating the distinction between priority one and priority two.* Other commenters appear to support replacing the current prioritization system with a “whole networks” approach, under which connectivity to schools and internal connections are funded together and all eligible services are given equal priority.²¹⁸ Commenters argue that this approach would give schools the flexibility to focus E-rate funding on those portions of their network where upgrades are most needed -- whether connection to the schools or internal connections. It could also eliminate incentives for vendors to re-characterize priority two services as priority one, or for schools to purchase more expensive priority one services – like cellular data connections– in lieu of cheaper priority two services, like internal wireless connections.

147. We therefore seek comment on whether we should more fundamentally shift the way we prioritize E-rate support by eliminating the distinction between priority one and priority two services. Under this approach we would instead allow schools and libraries to choose from one consolidated menu of services. Would this approach allow more schools access to funding for internal connections? Would this additional flexibility be beneficial? If we instituted this proposal, how should we determine the amount of support that each school or library receives? And if we took such an approach, how would we prioritize among funding requests to the extent they exceeded the funding cap? Would such an approach necessarily require a per-student or per-building limit, or other form of budget for individual applicants, as discussed above?²¹⁹

148. Are there other changes we should make to the prioritization of services? For example, instead of consolidating the two existing priority levels should we create more priority levels than currently exist? If so, what should be in the various categories and how should we transition services between the current priority levels and any new ones? Are there any other approaches we should consider?

ENA Comments:

With the assumption that some of the reforms to the administration of the fund will result in release of a reasonable amount of rollover funds to cover current Priority 1 (as revised with this proposal) and some level of current Priority 2, we would recommend while funding is still under the level of requests by such a dramatic amount, that E-Rate revise the priority system temporarily to 3 levels with a long-term expectation to consolidate into one tier in the future. We recommend the following revision to the Priority System - Priority 1a for Broadband Connectivity/Internet Access; Priority 1b is now all other items previously in Priority 1 plus internal broadband - aka Wi-Fi access points, related cabling and switches - delivered as either a purchased item or a managed service; and Priority 2 - all remaining

Priority 2 items. Priority 1a would also include one-time costs for broadband build-out consistent with current measures/controls (until we can come up with something better and also know the need for this funding).

It is possible we may need a 1c just for fiber build-out one-time to control that pool given funding resource constraints. Priority 1a - would be funded first, Priority 1b - would be funded next and if funds are not sufficient would be funded at a percentage of request to all discount levels - such percentage should be determined based on the demand letter to make sure no one has to wait for that determination. Priority 2 is likely to be unfunded in this scenario unless more funds are added to the program. We would ultimately like the program to remove funding priorities, but that needs to wait until we know the program is adequately funded (cannot be 50% or more behind need and just pass out the funds using simplified calculations - see comments on Para 149-162)

6. Simplified Allocation of Funds to All Schools and Libraries

149. In this section, we seek comment on a more fundamental approach to changing the distribution of E-rate funding. Under this approach, we would eliminate the discount matrix and the priority system; instead, each eligible applicant would receive a fixed budget at the beginning of the funding year to spend on any eligible services of their choosing. In contrast to the existing system, whether or not a school or library receives funding would be determined at the beginning of the funding year; thus applicants could know the amount of funding available before committing to any particular project. We seek comment on this approach. We seek comment on the costs and benefits of this approach, how this approach would impact other proposals we have discussed herein, and whether it would further our proposed goals.

150. If we adopted the simplified-allocation approach, we seek comment on how we should allocate such funds among eligible applicants. One method of allocating funding to schools would be to allocate funds to each school (or school district) on a per-student basis. Rural schools facing higher costs and schools serving low-income areas or student populations would receive additional funding for each student. Thus, a school serving a rural area might receive twice as much per student as a school serving an urban area, or a school located in an area with high poverty might receive twice as much per student.

151. If we were to adopt a per-student allocation system, how much additional funding per student should rural schools receive? How much additional funding for schools serving low-income populations? Should these determinations be done on a bright-line basis (*e.g.*, areas with poverty rates of more than 15 percent be classified “low-income” and those with less than 15 percent poverty “high-income”) or should we use a sliding scale (such as adjusting funding based on median household income, poverty rate, or some similar metric)? Should there be additional allocations for schools in remote areas (such as schools in the northern villages of Alaska)? If so, what criteria should we use for determining which schools should be eligible for additional allocations? Should there be a minimum funding level (a floor) or a baseline funding amount for all schools?²²¹ We also ask that commenters explain how this approach and any modifications they offer would affect schools’ and libraries’ ability to purchase the E-rate supported services they currently receive, those they receive no discount for today under the priority system, and those they are likely to need in the future in order to meet our proposed goals for the E-rate program.

152. Under this system, how should the Commission allocate funds among libraries? For example, could we look at the number of patrons served by a library or the population it serves? Should we adjust the funding for libraries based on whether they are located in a rural or extremely remote

area? Should we adjust the funding to reflect the wealth of the surrounding population? How do libraries determine the area they serve, and how could we adjust the allocation methodology to reflect the unique needs of libraries? Should we consider a per-building funding amount for libraries? We also ask commenters to explain the impact of this approach, and of any modifications they offer, to libraries' ability to meet their connectivity needs.

153. We also seek comment on how to allocate funding between schools and libraries. For example, should we look at the past allocation of distributed funds and reserve a similar proportion of the Fund for each group separately? Would allocating 90 percent of E-rate funding each year to schools and ten percent to libraries be a fair appraisal of historical spending patterns (or future spending needs)?

154. We also seek comment on how the simplified-allocation approach might impact group applicants, including school districts and consortia. For example, under this approach, should school districts be required to report the number of students at each school or could the school district simply report the total number of students in the district? If the latter, how should we calculate the per-student allocation, on a school-by-school basis or using some district-wide averaging? How do we ensure that all schools in a district or a consortia benefit from E-rate support? Would the fact that vendors know the budget of each school, school district, or consortium impact the ability of districts and consortia to drive down prices by aggregating demand?

155. In turn, how might this proposal impact consortia? Today, funding for priority two services is determined in part by the student-weighted average discount-level of consortium applicants. Does that system impact priority two requests, given that a lower discount might prevent a consortium from receiving any funding at all? Under the simplified-allocation approach, each school or library in a consortium could know up front the number of E-rate dollars it can bring to the table, and each consortium could prioritize its spending as it sees fit. Would that knowledge aid or inhibit the formation of consortia?

156. If we adopted the simplified-allocation approach, what sort of matching requirements should we include to ensure that applicants spend E-rate funds prudently? As discussed above, just last year the Commission found that requiring recipients of Healthcare Connect funds to contribute 35 percent of the costs of services gave applicants a strong incentive to control the total costs of the supported services and "appropriately balances the objections of enhancing access to advanced telecommunications and information services with ensuring fiscal responsibility and maximizing the efficiency of the program."²²² Could a lower matching funds requirement, such as requiring E-rate applicants to pay one dollar for every three E-rate dollars they receive, serve the same purposes for schools and libraries that depend on the E-rate program? Would such a requirement deter wasteful spending? Would a flat 25 percent matching requirement give applicants sufficient incentive to control the costs of supported services? Would the fact that they have a specific budget encourage some applicants to spend more money than they might otherwise, or would a specific budget aid schools in long-term planning and prudent spending? How would a flat 25 percent matching requirement impact schools' and libraries' ability to afford high-capacity broadband given that current contribution requirements range from 10 percent to 80 percent? Would it impose a hardship on certain schools, such as schools with few resources and facing extreme costs? If so, should there be an alternative matching requirement for such schools and under what circumstances?

157. We seek comment on the relative fairness to recipients of this approach versus the current system or other options we seek comment on in this Notice. We seek comment on whether, under this approach, recipients would benefit from a more stable, and predictable level of support from

year to year. Would such stability aid in long-term planning? We also seek comment on whether there are ways to implement this approach that would ensure that poor, rural schools and libraries that do not currently have access to high-capacity services get them.

158. Would the simplified-allocation proposal give local schools and libraries additional flexibility to meet their diverse needs, allowing some to prioritize higher-capacity circuits and others to prioritize connecting classrooms or deploying Wi-Fi? For example, could we retain support for basic maintenance and other services since funding availability will no longer depend on the specific services ordered by other schools and libraries?

159. One of the proposed goals is streamlining the administration of the E-rate program. We seek comment on whether adopting the simplified-allocation approach would further that goal or hinder it. For example, could we consider eliminating all or portions of our competitive bidding rules, and if so which ones? Under this approach, would schools and libraries' incentives to watch over their E-rate funds increase sufficiently to allow us to eliminate the 28-day waiting period? Should we eliminate the price as the primary factor requirement for competitive bidding? If we eliminate some or all of our competitive bidding requirements, should we continue to require applicants to conduct fair and open competitive bidding processes? How should we and USAC determine whether applicants' processes have been conducted in an open and fair competitive manner? How can we best protect against waste, fraud and abuse under the simplified-allocation approach?

160. We also seek comment on other administrative issues under the alternative funding approach. Should we eliminate FCC Forms 470 and 471 and replace them with a single-page form that requires the school or library to identify contact information, certify compliance with federal rules, and certify the number of students/patrons served? Would that initial application need to be filed several months before the start of the funding year (as FCC Forms 470 and 471 are today), or could the initial application be filed after the funding year begins? Could we eliminate the requirement that applicants for internal connections funding file technology plans? Could USAC bear a greater part of the burden of calculating funding amounts for applicants to simplify the process for them? If so, after that initial application, USAC could provide the school with the total amount of funding available in a commitment letter and the school would have the flexibility to spend that funding on any eligible service. Are there other forms, deadlines, or requirements, such as the technology plan and technology-plan-review process, that we could eliminate? To actually receive money, could a school submit invoices or other proof that it has paid and received particular services? Would this approach reduce the time between funding commitments and disbursements? Why or why not, and by how much?

161. What sort of reporting requirements would work best under this proposal? How can we best ascertain that applicants actually purchased supported services and that they are being properly used? Should we, for example, require a school district superintendent or school principal to certify under oath that all supported services are being used to benefit students. Would such a certification make sense at the beginning of the E-rate funding process (such as on FCC Form 471) or at its end (such as on FCC Form 486)? Should libraries be subject to a similar certification requirement? For example, should libraries be required to certify that E-rate funds are being used to benefit their patrons? Would the head librarian be the appropriate representative for such a certification?

162. If we adopted this approach, how could we phase it in over time to give applicants time to adjust? Or would this approach require sufficiently fundamental changes in the program that a flash cut would be required?

ENA Comments:

We cannot support this method at this time as it penalizes those who have already installed advanced services in support of stated goals. Without additional funding or other measures to address this, the program is not ready for a simple allocation method. We do believe that one could be considered in the future, but the funding methodology would be very difficult given the range of costs of bandwidth based on local conditions. For the time being we are in favor of only simple modifications to the existing system. Paragraphs 159 - 160 raise good questions about this method. However, should the FCC choose to implement such a simplified allocation and distribution of funds, we believe the requirement for conducting fair and open competitive bidding in compliance with local procurement law should remain, but all other FCC requirements should be removed except for perhaps limited reporting of usage plans. As long as schools were able to hit "targets" for bandwidth, the fixed allocation should be considered the main control along with some audit activity on a scope basis. Schools should receive moneys for the year in either monthly, quarterly or annual payments based on submission of a limited reporting document with certifications of proper use of funds.

D. Lowering New Build Costs and Identifying Additional Funding to Support Broadband to Schools and Libraries

164. *Public-private partnerships.* Are there steps the Commission could take to improve the private sector business case for deploying fiber to schools and libraries, or otherwise expanding connectivity, and thereby reduce the need for E-rate funding? For example, are there steps the Commission could take to facilitate use of new fiber runs for multiple business objectives, such as backhaul for cell towers or service to other enterprise users, and thereby incent greater sharing of new construction costs? Could waiving, forbearing from, or reducing certain otherwise-applicable requirements in conjunction with new infrastructure builds to schools and libraries help lower costs and therefore extend the reach of E-rate funding? Should the Commission condition certain forms of E-rate funding on changes in local permitting practices or other state and local policy changes (*e.g.*, state and local dig-once initiatives) to help reduce new build costs? What impact would such a policy have on schools and libraries on federal or other trust lands, such as Tribal lands? How can the Commission best coordinate with and support state, local, and Tribal government efforts to increase broadband access schools and libraries? Are there other Commission rule changes that would facilitate coordination or support state and local efforts?

ENA Comments:

We recommend an alternate strategy here that may accomplish the same goal. We would encourage the FCC to identify high cost locations and underserved areas based on the 471 approval process. The FCC should then interview and offer to assist a sample of those applicants based on applicant acceptance of assistance and highest need. The FCC could use many of the techniques listed in this paragraph to guide the applicant to improvement. In areas where the outlier condition is most extreme, the FCC should be able to work with local districts to exempt certain procurement rules in an attempt to attract vendors. This process may incorporate E-Rate and other FCC programs like High Cost and Rural Health Care to assist in making build-out of broadband infrastructure where it may not be economic based on market factors.

165. We also seek comment on other potential public or private sources of funding and how the Commission could help encourage the deployment of such funding to meet school and library needs. For example, in addition to the possible changes to the discount matrix discussed above, could the Commission make certain types of E-rate support, or E-rate support above certain amounts, conditional on state, local, Tribal, or private funds above the otherwise-required school or library 10-80 percent contribution? Would a larger emphasis on matching funds help recruit additional funding from

state, local, or private-sector sources? Would it disproportionately benefit schools with greater means or higher-income student populations? What impact would such an approach have on schools and libraries located on Tribal lands? Should schools and libraries operated by the Bureau of Indian Affairs or individual Tribal governments be exempt from such a requirement?

166. Are there other steps the Commission could take to encourage public-private partnerships to promote our proposed E-rate goals? For example, Verizon suggests that its Verizon Foundation Innovative Learning Schools program, which focuses on teacher training and professional development for select schools nationwide, complements E-rate but sometimes faces challenges with respect to E-rate gift rules. We seek comment on whether there are ways that E-rate could allow schools and libraries to take greater advantage of private philanthropy while still allowing the Commission to maintain appropriate control over E-rate expenditures and to prevent improper influence over E-rate service provider selections.

ENA Comments:

The FCC should focus on the goal of getting broadband and other advanced telecommunications services to schools and libraries and allow state and local procurement rules to guide gifts and charitable contributions. We assert that the gift rules added to the program in recent years are an added burden that has increased complexity without moving E-Rate closer to its goals. We recommend repealing the E-Rate specific gift rules and relying on already adequate state and local rules that govern billions of dollars of school purchases including E-Rate purchases.

State and local rules including bidding rules should allow vendors to monitor and follow existing paths to protest any inappropriate influence that might be gained from large “charitable” contributions. As a further comment on this topic, we believe that FCC comments on charitable contributions would indicate that the Verizon program described in paragraph 166 would be acceptable under current rules if no direct link to an active procurement could be demonstrated.

If gift rules are to remain, further FCC comment is needed to answer numerous questions that have been posed that remain unanswered. We would encourage the FCC to clean-up the charitable contribution and similar rules to allow vendors to participate in fund raising drives and events with school systems that actively request contributions from all vendors and the community (typically programs that have been active for years). We believe such programs are needed and valuable to support. These situations are in sharp contrast to a unique charitable contribution from a single vendor or its foundation.

An example might be a first day of school event that is sponsored by numerous interested community members. A negative example would be a vendor or foundation making a separate contribution in the year of a procurement.

167. *Coordination with other universal service programs.* We also seek comment on whether greater coordination of E-rate funding with funding from other universal service programs could multiply the impact of these other programs to support the goals of E-rate. In the *USF/ICC Transformation Order*, the Commission adopted broadband service obligations for eligible telecommunications carriers (ETCs) that receive high-cost support.²²⁵ The Commission noted that it expected ETCs to engage with community anchor institutions, which include schools and libraries, in the network planning stages with respect to the deployment of Connect America-supported networks.²²⁶ Both price cap and rate-of-return ETCs that receive high-cost support are already required to include in their annual reports the number, names and addresses of community anchor institutions to which the ETC newly began providing access to broadband service in the preceding calendar year.²²⁷

168. We seek comment on how to minimize any overlap in funding for broadband, while extending the reach of both programs to support the deployment and adoption of broadband by E-rate applicants? How can we best ensure and encourage the two support mechanisms to achieve our universal service objectives, including the goals identified herein? For example, should we consider what portion of deployment should high-cost funding support and what portion should E-rate support? Would it be useful to specify that certain costs – such as construction charges to extend fiber to the school or library property line – are funded by high cost, and other costs – such as recurring charges for broadband service – are funded by E-rate? What measures should we adopt to ensure that there is no duplicative funding of the same facilities or services from the two programs?

ENA Comments:

We agree that High Cost could supplement build-out and E-Rate would pay for recurring service. The FCC has to be careful not to restrict competition in this situation. Perhaps this technique could be used once E-Rate is filed for a year - go back to the applicant and provider to see if some of the high costs could be switched to the High Cost program in the future.

The High Cost program should not be used to improve the competitive position of any one vendor or class of vendors. Reform of the High Cost program may be required to allow it to play fair with the E-Rate program and its service providers.

Ongoing cost metric testing during the 471 approval process would indicate if a district still exceeded cost guidelines even after the High Cost program contribution. If so, it would get reviewed and any duplicated billing should be discovered.

169. The Commission has concluded that a forward-looking wireline cost model will be used to determine support to be offered to price cap carriers. After the model is finalized and adopted for Phase II purposes, should we consider how it might be used or modified to assist in determining the cost of providing fiber-based broadband to the E-rate applicants in the relevant geographic area? Could we use a model-derived cost to establish a benchmark for the prices an E-rate applicant should pay for broadband? Should we instead consider a model-derived cost—with the relevant E-rate discount applied—as a cap on the amount the E-rate program will fund for such broadband?

ENA Comments:

We recommend that for high cost applicants identified during the 471 approval process that the FCC consider whether efforts to assist the applicant could be combined with High Cost program initiatives (or rural health program initiatives) to serve the goals of both programs. Information from the high cost program may be valuable to help validate high cost E-Rate applications. High cost area methods and data can help develop cost guidelines discussed throughout our comments. However, we caution the FCC not to set a price cap, as even within a community, the cost of serving a site can be higher than the rest of the community - specific identification and testing should be called for if cost standards are exceeded - not immediate non-funding of the highest need schools. We have seen many cases where one school is on the other side of the mountain from the other schools in the district but in the right location to serve a population of students. The cost of such a location can be much higher than the rest of the schools due to valid reasons (typically for a rural district of 10 schools, 8 or 9 are serviced pretty easily at fairly standard pricing. It is the 9th and/or 10th site that is dramatically more expensive due to location).

171. In the *Healthcare Connect Fund Order*, the Commission allowed an exemption from the rural health care competitive bidding obligations for health care providers entering into a consortium

with E-rate participants. Should we consider a similar accommodation for applicants to the E-rate program?

ENA Comments:

Given that only a subset of E-Rate vendors has participated in the rural health care program, it seems anti-competitive to allow exemption from competitive bidding in this situation. Since E-Rate rules allow for considering existing contracts during a competitive bidding process, there is already a path to determine if such a consortium is the most cost-effective solution. We recommend encouraging E-Rate applicants and vendors to consider whether these consortia could be the most cost-effective solution as part of the current or reformed E-Rate competitive bidding process, but not to provide any exemption. An exemption seems to be an easy way for a higher cost solution to be adopted by a school system.

Ultimately, whether an exemption is allowed or not, cost based testing during the 471 approval process should detect abuse of this option.

172. *Funding the proposed goals through E-rate.* In this Notice, we seek comment on various approaches to refocusing or reprioritizing funds, or adjusting the support levels for certain services, as well as other proposals that will reduce costs while better targeting support to help schools and libraries get the connectivity they need. We seek comment on whether, in concert with these changes, enough funding will be saved or preserved to enable the E-rate program to meet our proposed connectivity goals within the existing E-rate funding cap. Recent reforms to the other USF programs were achieved without having to increase the overall size of the USF. For example, the Commission established a budget for the Connect America Fund and a savings target for the Lifeline program. Also, the Commission recently reformed the Rural Health Care program to encourage consortium applications, increase eligibility in covered services and provide applicants more flexibility in renewing multi-year contracts. We ask commenters to identify the funding that could become available as a result of the reforms suggested in this NPRM and whether these reforms will result in sufficient cost savings to the E-rate program to meet our proposed program goals.

ENA Comments:

We agree that the FCC should evaluate all potential avenues to improve the cost efficiency of the program. We believe the cost-based testing that we are advocating will provide a method to identify significant improvements. We also believe the simple information gathering we are advocating will help to quantify the need better than the limited picture that we have today.

We assert that the cost efficiency of schools and libraries purchasing connectivity is on average reasonably high. We have experienced costs per unit dropping dramatically, significant competition for most areas we serve and significant diligence by applicants to get the best costs. This assertion can be supported by the growth in average bandwidth per school (which needs to be verified through 471 data collection) from likely 128k per school in 1998 to 10 mbps per school in 2013. This represents a 77x increase in bandwidth with about a 2x increase in priority one fund demand. Our statistics here are a best guess but we would expect somewhere between a 25x and 100x increase in average bandwidth over the life of the program. Schools and libraries have contributed significantly to the service growth and the cost improvements.

However, no matter how good the program is at cutting costs, it is unlikely that the measures adopted will save enough funds to cover the \$2 to \$3 billion per year E-Rate shortfall that many are projecting. This is due to increased usage by schools to support education goals - a good thing. Schools bandwidth usage is increasing much faster than other segments as Internet replaces other tools such as textbooks

and supplements and even on-site teachers. The ability to reform and fix the other programs does not seem to work for E-Rate. School budgets are stressed and increasing technology is not something that generates profits to pay for the technology (like might occur with rural health). Therefore, we are hoping that after 15 years, E-Rate 2.0 will also right size E-Rate funding. Without that many of the reforms are useless and effectively just moving the moneys around and not creating growth in service to schools.

173. Alternatively, we seek comment on whether a temporary increase in the E-rate cap is necessary to reach our goals and ensure high-capacity broadband connectivity to and within schools? If we were to authorize such a temporary increase, should we modify our rules to focus the temporary funds on providing services related solely on high-capacity broadband connectivity? What services should be eligible for support under such a short-term program? How much short-term funding would be needed to connect all or virtually all schools to infrastructure or other connectivity sufficient to meet their needs? How much short term funding, and over what period of time, would be needed to provide robust internal connections sufficient to take advantage of the high-capacity broadband connectivity to schools and libraries? Should any such funding be allocated using the generally applicable discount matrix, application process, timeline, and other rules, or should we consider modifications, for example to accelerate availability of funding for upgrades? If we consider a temporary increase in E-rate funding to upgrade school and library connections for digital learning, should we limit participation to only some category of applicants, such as only regional consortia?

ENA Comments:

We do not support this concept. We have heard this concept being floated and have a hard time finding much validity in it. Vendors have been selling special build fiber to schools for years with long contracts at high dollar amount followed theoretically by a long period of low maintenance only costs. This model has been deployed in a small portion of well situated schools to date. However, many of those models were predicated on attracting other business to support the costs and such business has been apparently hard to attract leading to slow or limited growth of this connectivity option. We are very concerned that the costs to do some kind of fiber build to a large portion of US schools would be extraordinarily costly and result in networks that schools are locked into for ten or more years. Long-term they might appear less costly, but that is only in places where they have been deployed and does not account for the declining cost of bandwidth over that period of time. It is entirely possible that higher costs were paid to build and that eventual maintenance costs are not much less than what bandwidth would be anyway over time. An alternate consideration could also be to allow traditional vendors to contract for 10-20 years with renewals and see what their long-term costs would be. If they are also amortizing build, it seems that the models could ultimately come out pretty close on cost.

174. Should we instead consider a more permanent change to the cap to achieve the goals of a modern E-rate program? When the Commission adopted the \$2.25 billion cap 16 years ago, it recognized that it was a best efforts attempt to estimate what the demand would be for telecommunications and Internet access services by schools and libraries. Commenters advocating an increase in the cap emphasize that every funding year applicants have requested more than is available in E-rate support. They further argue that because of the effects of inflation and the growth in the number of students in our nation's schools, the actual purchasing power of the E-rate program declined by nearly one third from the start of the program in 1998 to today. We seek comment on these arguments.

ENA Comments:

Supporting our earlier comments, we agree that a permanent increase in funding is warranted to get to

the goals of the program. Inflation measures implemented after over 10 years that are not retroactive and that do not include energy costs are completely ineffective in keeping up with the demand for more bandwidth and related costs – no matter how efficient purchasing efforts are at reducing costs.

Assuming our current 10 Mbps per school estimate is accurate, the program is setting goals that applicants need to increase bandwidth by 100x in shorter than 15 years. Increasing speed by 77x over 15 years has increased Priority 1 requests by at least \$1 billion. Given that 1 Gbps technology requires schools to move closer to cutting edge speeds, it is likely that as first movers, costs will be higher per unit. Much of the favorable cost per unit improvement over the past 15 years likely comes from the fact that schools are not the first movers in their community and taking advantage of joining with existing middle mile networks at currently available speeds.

An additional factor that could drive higher cost is how much investment is required across the middle mile and upstream Internet infrastructures to support such a dramatic increase in school traffic/need. Schools trying to catch up will create more demand that is likely not to be available without investment by carriers and such cost must be recovered or carriers will decline to provide services.

175. Also, under either a temporary, long-term or permanent approach to providing additional funding, would it make sense to initially provide funding to a small group of schools and libraries on a competitive basis with the goal of developing best practices and cost-effective approaches to building out high-capacity broadband services? Are there other ways to use competitive approaches to maximize the impact of funding?

ENA Comments:

We do not believe such a pilot or test would be indicative of the nationwide need or conditions. We do believe that cost improvement for those that are outside of expectations will need an applicant by applicant approach. In general, we believe that the competitive requirements of the program have been successful. Demand, and not poor purchasing or other practices by applicants, has driven the need for additional funding to date. Future bandwidth goals continue that growth in demand and require some level of additional funding.

IV. MAXIMIZING THE COST EFFECTIVENESS OF E-RATE FUNDS

A. Background

177. In providing schools and libraries with affordable access to high-capacity broadband services, we also seek to adopt policies and rules to meet our proposed second goal to ensure that schools and libraries purchase services and equipment in a cost-effective manner. When the E-rate program was created, the Commission adopted a number of rules aimed at encouraging cost-effective purchasing of E-Rate supported services. Most notably, the Commission allowed applicants to apply for support as part of a consortium and required E-rate applicants to seek competitive bids for E-rate supported services. The Commission recognized that by forming consortia, eligible schools and libraries could aggregate demand for E-rate supported services to drive down prices. Likewise, the Commission adopted competitive bidding requirements in large part based on the theory that competitive bidding would drive down prices for E-rate supported services. More recently, the National Broadband Plan recommended, that we work to make broadband-related purchases more cost-efficient within E-rate.²⁴¹

178. We therefore seek comment on various options aimed at increasing cost-effective purchasing by E-rate applicants, including ways to encourage more consortium purchasing and other

forms of bulk buying; provide more transparent pricing for E-rate services; reduce single or no bid contracts; and ensure that specific contracts for E-rate supported services are cost-effective. We also seek comment on creating a model schools and libraries program aimed at identifying specific best practices for cost-effective purchasing. In addition to seeking comment on these ideas, we invite commenters to suggest other ways to drive down prices of E-rate supported services in order to maximize the cost-effectiveness of purchases made with E-rate funds in furtherance of our second proposed goal for the E-rate program.

ENA Comments:

We are concerned that the statistics have not been compiled to review this accurately. The total cost has increased, but we believe the bandwidth per school and student increased even more as applicants move toward 100 Mbps goal. We have seen hundreds of RFPs over the last few years and have seen requested speeds increase and costs drop significantly per unit in almost every situation. We are not measuring this correctly - when we do, we may see that the districts are doing a great job in purchasing in general. Let's not get carried away with cost-efficiency measures until we measure at a per Mbps level. Per student without per Mbps for bandwidth is irrelevant and dangerous information.

ENA recommendations to use the Form 471 Block 2 (or Block 5 under the 471 NPRM) to mandate gathering bandwidth speeds should quickly generate a basic picture of cost per unit and current status versus broadband speed goals.

B. Increasing Consortium Purchasing

180. At the same time, in funding year 2011, consortium purchasing accounted for only about \$300 million of E-rate funds committed by USAC, or about 13 percent of all E-rate funds disbursed. In the recent *Healthcare Connect Fund Order* the Commission found that bulk purchasing by consortia helped drive down service rates, increase bandwidth, improve service quality and reduce administrative overhead. We therefore seek comment on whether we should adopt additional incentives or mechanisms to facilitate the use of consortium purchasing in the E-rate program. In particular, we are interested in ways that consortium purchasing can drive down prices and otherwise benefit applicants and the E-rate fund.

ENA Comments:

Consortia statistics are likely inaccurate. Consortia can be used to develop contracts and then individual members may file the 471s on their own. Schools in TN and IN and libraries in IN participate in a consortia bid and then file individual 471s - about \$100m of E-Rate filing for those entities alone. The 471 indicates which services are being purchased under a state master contract or similar. That should be expanded/refined to clearly capture what schools are already using consortium like purchasing power.

The FCC should reevaluate these statistics to verify that they have a correct understanding of the current impact of state contracts and other large consortia contracts.

As a vendor that serves under state contracts, consortia and individual applicant contracts, we caution the FCC against believing that any one purchasing method is superior. Cost per unit testing during the 471 process should identify high cost applicants no matter how they are purchasing. In some situations, there may be cost-effective improvement gained by a school system considering a consortium. However, that may not always be the case.

In many statewide situations, the cost to serve low cost areas is blended with the cost to serve high cost areas to get a blended rate that is better for some participants but perhaps not for all. Again, we would lean on purchase method neutral ways to determine high cost and review/assist on those specific situations – that is, cost per unit testing as part of the 471 process.

181. We also seek comment on whether there are legal, geographic or other barriers preventing certain schools and libraries from taking advantage of consortium purchasing. Are there ways in which our rules prevent or discourage participation by applicants who might otherwise join a consortium? We invite commenters to identify specific amendments we can make to our rules to ensure that applicants can join or form consortia.

ENA Comments:

Consortia are available in many states. Some are state agency developed and fully or partially state funded. Some are consortia of school systems or libraries. E-Rate rules do not seem to be a significant barrier to consortia formation – no more than they are barriers to other applicants/applications.

We would recommend that the letter of agency requirement be removed from both state agency and district led consortia. There is no harm in doing a bid asking for pricing for all potential schools and libraries in an area. Vendors are smart enough to determine which bids have actual members and which are not supported. The risk of membership in multiple consortiums can be alleviated through the 471 testing that has been advocated earlier with some adjustments for consortia participation.

182. Are there other actions the Commission can take to remove barriers to participation in consortia? We recognize that not all applicants choose to join a consortium and we therefore ask about the factors that contribute to an applicant's decision to join or not to join a consortium. In particular, we seek comment from applicants on how they weigh the administrative benefits of joining a consortium in the E-rate program against the burdens the program imposes today. We seek comment on whether there are consortia-friendly application processes that would minimize the administrative burden on applicants and USAC. Should we, for example, prioritize consortium applications in the USAC review process? Should we allow for prioritization for all consortia or only those that, for example, include the neediest schools and libraries? In what ways should we streamline the consortia review process? What steps should we take to avoid disadvantaging schools and libraries unable to participate in consortia, such as some schools and libraries on Tribal lands?

ENA Comments:

The E-Rate program requirement for a letter of agency should be eliminated and the FCC should rely on state and local rules to govern participation in contracts. There is no significant value in completing such extra paperwork if cost per unit testing of the 471 is adopted.

The Form 479 should be eliminated. We recommend that all participating districts complete one Form 471 per year even if it is a "certify only" 471 indicating that all service is paid for through a consortium application.

If consortia are cost-effective, they should have the same chance of passing through PIA electronically as other applications. There is no need for prioritization if that reform occurs. Schools in cost-advantaged locations may not need consortia to get the best price and therefore, they are more likely to go it alone. However, consortia will get a higher price if the easiest to serve areas are not included - need some balance to deliver lower pricing to otherwise hard to serve areas. Vendors watch consortia membership closely to make sure they are not offering a statewide rate that is only selected by very high cost areas

("adverse selection" risk). Schools should not be penalized or applauded solely for their decision to join or not join a consortium. They should be measured on their service received vs. goal and price paid guidelines regardless of the purchasing vehicle they select.

Once established, a consortium should be available for use by any entity allowed to purchase from that entity under state law. For example, if state law allows all districts to purchase off a contract then school systems should be allowed to use that vehicle during its life without additional bid. Cost testing during the 471 process should be able to identify any abuse of such situations.

183. We also seek comment on whether particular types of services lend themselves better to consortium purchasing. For example, we note that while schools and libraries might join consortia for broadband access, they might apply independently for internal connections. In particular, we seek comment on whether consortia are effective vehicles for driving down specific costs, such as equipment purchases or broadband access.

ENA Comments:

Both can be effective - although equipment would likely require more detailed agreement among the members regarding standards, etc. Equipment would be more likely to be a multiple award bid. Much of the value of a consortium or state contract comes from the skill of the local lead in developing a valuable contract for potential users.

184. We seek comment on whether our consortium procedures have different impacts depending on the composition of the consortia. For example, are there disparate impacts between consortia that include only schools, or only libraries, or both schools and libraries? Is the formation of consortia impacted by potential disparities in discount levels? Are consortia that include other entities such as health care providers and/or public sector entities such as state colleges and universities, educational broadcasters, counties, and municipalities impacted in different ways? While we seek comment on these consortia configurations, we also open the inquiry to whether there are other entities that join with schools and/or libraries to create consortia and whether there are specific impacts on those consortia. Given the potential efficiencies of broadband networks that serve multiple types of anchor institutions, are there steps we can take to facilitate the formation of consortia that extend beyond schools and libraries?

ENA Comments:

Aggregation with non E-Rate entities requires a common way to work together. That is typically not seen - even between libraries and schools. As libraries catch up to school bandwidth, a natural combination would be the local school and local library system at a minimum. However, we rarely see this occur.

Blended discount levels in the current consortium calculation can be manipulated. The calculation is a simple average of district discounts - not an average based on size of the members. A consortium with a lot of small high discount rate districts will get a large rich district a better discount rate. We recommend that consortium 471s compute a discount just like a big district - total students vs. total free reduced lunch for all - not a simple average of the districts. That would make it fair. This is consistent with the reforms recommended in this NPRM.

Using consortia for filing 470/competitive bidding and district filings for 471 has allowed for districts to retain their unique discount level.

All broadband networks in a community need to serve multiple customers to be cost-effective to build. Even if schools are not combined in a consortium with others, they are getting the pricing value of the vendor having multiple other customers in the area that the vendor can use to amortize build against. The highest rates result when the school is the only one on the fiber in the area. Hard to serve schools could try to encourage locals to also agree to be part of a new network to attract a vendor to build. This may or may not be in form of an official consortium but may be with individual contracts with a vendor. FCC should consider adjusting its bid rules when an underserved area must recruit a new provider – i.e. there may only be one bidder and the district may have to interview and recruit the vendor just putting out an RFP.

185. Finally, while we are eager for schools and libraries to secure the many benefits that consortia can provide, we are mindful that aggregation of applicants can also diminish competition. We seek comment on whether service providers who would compete to serve some of the entities in a consortium might not bid if they could not serve the entire consortium. As a result, a larger consortium could leave a single bidder facing little pressure to pass on any reduced costs to applicants. We seek comment on what the Commission might do while encouraging cost-saving consortia so as to minimize, if not avoid, negative effects on competition.

ENA Comments:

This is a reason to allow local districts (and states) to make the decisions on best path. The FCC can test the costs of the results and help guide future decisions if costs are out of line.

Vendors such as ENA are successful in controlling costs by using a large number of vendors to cost-effectively serve larger geographies which have consortium style contracts. ENA can leverage the buying power of multiple consortium members with applicable vendors that are subsets of the entire consortium. ENA's typical bid on a statewide consortium bid will likely leverage ten or more local vendors taking advantage of where each has lowest costs.

C. Encouraging Other Types of Bulk Buying Opportunities

186. We seek comment on how best to encourage other types of bulk buying of E-rate supported services. Currently, consortia are one of many ways that E-rate applicants aggregate demand for E-rate supported services in order to reduce prices and procure necessary services. In some cases, E-rate applicants purchase from state master contracts, which offer prices, terms and conditions negotiated by a state on behalf of a wide range of public institutions within that state. In many places, state or regional research and education networks (R&E networks) are also available and offer bulk purchasing opportunities for applicants. In other cases, E-rate applicants may be able to take advantage of regional contracts managed by public, non-profit or private entities that also aggregate demand and manage the procurement process. Should applicants be required to purchase from these state master or regional contracts in which they may participate, unless they can receive the same services for a lower price? We seek comment on the benefits and burdens of these and any other methods that E-rate applicants currently use to aggregate demand for E-rate supported services and request that commenters provide data on how effective such approaches are for driving down prices and creating administrative efficiencies for E-rate applicants. We also invite applicants to identify and comment on other methods of bulk buying that exist outside the E-rate program and whether such methods could be successfully adapted to the E-rate program.

ENA Comments:

We agree that using existing options should be allowed within standard local and state procurement methods. We do not believe it should be mandated. We believe schools if given a better service and price will select the right choice consistently. However, we must be careful, especially for bandwidth, to understand that cost-effective is the rule not solely lowest price. Quality of service is important as indicated in some of the discussed service measurements in this NPRM. If local rules allow purchasing off multi-state buying entities, that should be allowed for E-Rate. We see such behavior explored by many of our customers in non E-Rate purchases. This is easier with equipment and more difficult with bandwidth. Cost per unit testing must be in place to make sure that any such purchases meet overall cost guidelines.

187. We also seek comment on whether the Commission, working with USAC or some other entity, should create a formal bulk buying program for E-rate supported services. If so, are there specific products or services that such a program should cover? For example, are there certain products, like wireless routers, that are standard or common to school and library networks nationwide? Generally, how would such an initiative work within the structure of the current E-Rate program? How would such a program appeal to applicants?

ENA Comments:

This option should be deferred until more information is determined on what applicants are purchasing via revised 471 data collection. Even then, this option should be pursued cautiously as there are many different solutions that have been adopted for good reason by districts across the nation over 15 years and trying to cover all of those without inappropriately favoring a vendor is problematic at best. If the FCC does this, they effectively begin making decisions on vendor selection and lose their role as the neutral facilitator and funder of local decisions. Does the FCC punish applicants that have a different technology approach than one "sponsored" by the FCC? Is the FCC going to create an anti-competitive, anti-innovative scenario by advocating one vendor over others? Does the FCC have the purchasing skills to perform this function - how much would it cost to generate those capabilities from scratch? In your example of wireless routers, we are aware of at least seven vendors who are actively competing to earn school business on the equipment side just for the WAPs. There is not and probably should not be one clear winner. If pursued, this option has potential value only with equipment and not with bandwidth, cabling and other location specific services.

188. If we adopt a bulk buying program, should we amend our rules so that purchases made using the program would be exempt from our competitive bidding requirements? Would we incentivize participation by preempting all or some of the USAC review processes for applicants who purchase through the bulk buying program? How should we treat applicants who purchase products and services that are available through the bulk buying program, outside of the bulk buying program? Should we, for example, treat the prices available through such a bulk-buying as the maximum price for which an applicant can seek support?

ENA Comments:

This set of suggestions is full of pitfalls. We disagree with any incentive to use the FCC program vs. other options for many reasons. First, many districts already have cost-effective, multi-year contracts and those districts would be effectively punished for already having it right. If this is put in place and it generates lower costs, the incentive to use is simply - it is lower cost - no further incentive is likely needed. Adoption is likely to be slow as applicants decide whether the quality of service is adequate with the new purchasing channel and schools wrestle with whether the FCC list is eligible under state purchasing law. Certainly if the FCC creates RFPs for service and selects winners, then the locals should not have to also do a procurement - but does the FCC want to do that? How do they make a technical

evaluation on behalf of thousands of schools on other than the most generic items?

We do not believe such a program should be a mandate or a price ceiling. We believe if implemented at all, it should be an option that applicants can compare with other available solutions. The measure for further review should be cost guidelines as proposed earlier. Where the applicant is getting the service from should not be the issue. We are very concerned about the invasiveness of this suggestion -- this seems to be well outside the expertise and mission of the FCC. Applicants would have limited leverage to complain or force service improvement with chosen vendors once this method of procurement results in contracts.

189. On the other hand, are there benefits to consortium membership or independent purchasing that could be lost if we were to encourage alternative bulk-purchasing arrangements? By suggesting one bulk buying option, we do not intend to foreclose others, and seek comment on other options.

ENA Comments:

If the FCC does go into the purchasing business, which ENA does not recommend, that should not be the sole avenue for purchase and all other options should still be allowed and tested within a method neutral framework based on cost.

There are also numerous examples of symbiotic relationships between communities, schools and local vendors that generate very low costs and locally based service and support. Placing any barrier on such options would be detrimental to E-Rate program.

190. We also seek comment on whether E-rate applicants can lower costs by aggregating data traffic. As we noted earlier, many schools and libraries use district-wide or regional WANs to provide broadband connectivity between buildings. Similarly, state R&E networks can provide high capacity routes from major locations within a state, relying on national networks for long-distance connections and local connections to reach smaller communities and buildings within a community. By partnering with WANs or R&E networks and aggregating Internet traffic, schools and libraries may be able to further drive down prices. E-rate applicants may also work with WANs and R&E networks to purchase circuits and network equipment in bulk and to take advantage of knowledge and relationships with commercial service providers. We seek comment on policies that we can adopt to encourage E-rate applicants to leverage these other networks to lower prices.

ENA Comments:

Applicants band together already in many ways across the country to buy services and equipment. This trend is likely to continue as advanced communication methods make it easier for groups to meet and conduct business. Recent and ongoing rule changes have made it easier for such aggregators to bid on K-12 business. In addition, such aggregation has been occurring in most markets already. More competition is good and so rules that allow any provider to deliver service is a step in the right direction. Advocacy to change state procurement laws may be required for schools and libraries to purchase from certain entities. Applicants should not be penalized if they are not allowed to purchase services based on state law from a given contract or multi-state procurement.

Removal of LCP complexity would be another way to attract those vendors. LCP's purpose can be accomplished in a simpler manner using cost testing associated with 471 processing.

D. Increasing Transparency

192. *Transparency of E-rate spending.* We seek ways to increase transparency with respect to how E-rate funds are allocated and spent. The National Broadband Plan, for example, recommended that we “collect and publish more specific, quantifiable and standardized data about applicants’ use of E-rate funds.”²⁵⁴ We accordingly seek comment on whether USAC should be required to create a website where any American could easily look up the details of how any participant in the E-rate program had used its funds in any given year. How should such information be organized? At what level of detail should it be reported? Would such a website provide valuable information to parents? Would it encourage officials to spend money more wisely? How else can we increase the transparency of E-rate spending, including the access that local journalists, school boards, librarians, city governments, and parents have on how E-rate funds are allocated and on what they are spent?

ENA Comments:

The DRT is available to anyone. We believe a combination of gathering better information on the 471 re what is being purchased and including some of those facts on the DRT will provide ample disclosure. The FCC can encourage interested parties to go to that tool for information. Numerous third party websites and consultants use that data to deliver much of their current analysis. ENA recommends that the FCC start with simple information such as Internet bandwidth, WAN bandwidth, etc. to go with the cost information already provided.

In addition, school budgets are public, school board meetings where contracts are approved are public, there are already lots of ways for the parties listed to understand what is being spent - no need for E-Rate to do much more - the only reason is to quiet e-rate critics and a comprehensive shared strategy of where data is located may be better than just wholesale aggregation of data for no other purpose. Don't ask for data solely due to "transparency" - only request data that the program needs to operate.

The FCC can also designate that they rely on local and state law to govern the access to this information as states already have specific laws regarding sunshine rules, access to information, etc.

In the spirit of increased transparency, USAC itself should be more transparent as to the status of an application – particularly for applications that are on hold for any reason.

193. Below we seek comment on ways to streamline the E-rate application process. In line with that discussion, how can we minimize the reporting burden on schools and libraries while maximizing the insight the American public has into the spending of E-rate funds? For example, schools report certain characteristics such as the number of classrooms connected on the current Form 471, but that information must be reported before a school has completed a project and before a school has even received a commitment of funding. Could we reduce this burden by instead requiring the disclosure of relevant information (such as capacity leased or wireless access points purchased) on the back-end as part of the invoicing/payment validation process (perhaps as part of Form 486)? Should we require such reporting in a standard format or allow or encourage a fuller description? In short, can we simultaneously increase the transparency of E-rate spending while reducing the burden on applicants?

ENA Comments:

ENA does not support creation of an after purchase report. The 471 should show what the entity intends to purchase with the funds either in Block 2, Block 5 or on the Item 21 attachment. We believe Block 2 could be expanded/adjusted and Block 5 expanded/adjusted to meet the criteria to do better approval testing and to provide needed data to understand service levels purchased. Initially this would be at a simple level and then as it is improved over time it might adjust based on actual data collected - reform

should be ongoing and annual - not an every so often huge NPRM.

Reporting additional necessary information gathered on the DRT would improve transparency. In the event that the Item 21 is retained as effectively a second form, it should be available just like the 471 is currently available on the SLD website. Such availability would greatly improve transparency vs. current practice with data already submitted.

We recommend a redesigned 471 that incorporates the Item 21 attachment into the same form with more standardized methods of reporting services and speeds requested.

194. *Transparency of prices available for E-rate supported services.* We seek comment on how best to increase the transparency of prices for E-rate supported services. Are there publicly available online forums, blogs or other media, where schools and libraries can share information about the best prices and deals for E-rate eligible services? If not, or if currently available information is insufficient, we seek comment on what role, if any, the Commission or USAC should have in operating, hosting or endorsing websites or other ways of encouraging service providers to share pricing information with E-rate applicants, and facilitate price comparisons. We invite commenters who have experience with other information exchanges to comment on examples of what does or does not work in other contexts, and whether there are models we should look to in unrelated markets or other countries.

ENA Comments:

The DRT suggestions above should enable most of this. Bandwidth is much different and more site specific than other supported services. It is relatively easy to find pricing for equipment and non-location specific services and compare. In addition to DRT, consider developing a best practices area for applicants to share ideas without FCC penalty.

195. *Transparency of prices being bid for E-rate supported services.* Our competitive bidding rules require applicants to publicly seek bids for E-rate supported services, but our rules do not require applicants or service providers to make the responses to those bids public. Should we consider making bid responses public or at least accessible to other E-rate applicants? Would it be advisable to release this information only after the applicant has selected a vendor for the requested services? Are there any state laws, court orders, or contracts expressly prohibiting such disclosure? If we do require public disclosure of bid responses, what is the best format and timing for making such responses public in order to maximize the usefulness of such information to other E-rate applicants? To what extent would publicizing such bids drive down prices, both with respect to specific applications and more generally? On the other hand, is there a risk that public bid responses inflate bid prices for E-rate supported services by, among other things, discouraging providers from bidding to provide E-rate supported services? Could such disclosure facilitate tacit collusion to restrict competition through coordinated pricing, market allocation or other approaches that would inflate the price or reduce the quality of E-rate supported services? We also seek comment on the degree to which state, local, and Tribal laws currently require the disclosure of bid responses for E-rate supported services, and whether service providers can and do limit any such public access.

ENA Comments:

All states have laws governing release of this level of data - creating an additional FCC standard would be time-consuming and could create significant legal conflict - we suggest allowing local law to prevail - vendors and the public can typically get access to results (many times large bids are discussed in detail in

public at board meetings or even public bid scoring sessions). The negative consequences listed in this paragraph are also reasons not to do this.

Probably the best way to facilitate better understanding of service costs is the mandated 471 Block 2 (or Block 5 under the 471 NPRM) information and incorporation of Item 21 attachment information into the 471. Combine that with disclosure of some of that data via the DRT and vendors and applicants would have an improved ability to understand what applicants currently pay for service.

Note that the information available in the E-Rate program today is much easier to access and better than the information a vendor can get for commercial transactions, where obtaining pricing data is protected by both vendor and service recipient without any requirement to disclose such pricing.

196. *Transparency of actual purchase prices.* As an alternative to requiring public disclosure of all bids to provide E-rate services, we seek comment on making available the prices applicants are paying for E-rate supported services. We note that applicants currently provide that information to USAC. We seek comment on whether we should direct USAC to permit public access to FCC Form 471, Item 21 information or any other information provided by either applicants or service providers participating in the E-rate program. Are there any state laws, court orders, or contracts that would prohibit such public disclosure? Should we limit disclosure of pricing information to other E-rate applicants? We also seek comment on whether requiring public disclosure of the prices applicants actually pay for E-rate supported services create a more effective competitive marketplace for those services and products, or might service providers eschew participation to shield their prices from public view. Could such disclosure facilitate tacit price fixing, bid rigging or market allocation schemes, thus inflating the price of E-rate supported services? In the alternative, do commenters believe that publicly displaying prices may encourage more service providers to approach individual schools and libraries with lower prices and discourage participation in consortia or other aggregate buying groups? Might transparency of pricing also help ensure that providers are complying with the Commission's lowest corresponding price rule?

ENA Comments:

Form 471 access is already available to anyone via the SLD website. Expanding access to include the Item 471 attachment when filed electronically seems like the easiest and best thing to do - we are not sure why this is not already public information available upon request. For Item 21 attachments submitted with attachments or offline, the FCC will have to determine a simple method to allow requested information to be provided. We recommend more standardization of the Item 21 attachment and incorporating it completely into the online 471 – perhaps initially only for P1 services. Certain practices such as sending entire contracts as the Item 21 should be discouraged in favor of specific information reporting in relatively standard format – which could be part of an expanded Block 5.

From a price competition standpoint, it is unclear that such data will make a dramatic impact as interested vendors can typically determine a basic understanding of current pricing from the 471 data already available.

198. *Greater Assistance to Schools and Libraries.* We also seek comment on whether the Commission, USAC, or other entities should take a more active role in assisting applicants in identifying cost-effective purchasing options. The Commission previously directed USAC to develop a pilot program testing an online list of internal connections equipment eligible for discounts. USAC has not updated the database in some time in part because keeping the list current imposed significant administrative burdens on both USAC and vendors. We propose to terminate that pilot program and we invite participants to comment on how the Commission can transition to a more effective system to provide

more transparent price information for applicants. For example, should we direct USAC to establish an office to help applicants identify the best prices for E-rate eligible services and products? Such an office could be staffed by consultants with expertise in configurations of educational technologies and the best prices and service providers, and could mine the USAC E-rate databases to identify and publicly disclose attractive prices, terms and conditions for the products and services. We seek comment on the likely cost of providing that sort of expert assistance and whether the benefits of such an undertaking would outweigh its costs. We also ask whether we can, or should, limit access to this pricing data to participants in the E-rate program.

ENA Comments:

We understand the spirit of this suggestion and appreciate a desire to help applicants lower what they spend. The method indicated seems off-target, anti-competitive and costly. Specifically, the FCC should never indicate where someone has received "an attractive price" as that is effectively recommending a specific vendor. Finding generic or global statistical data and publishing that is unlikely to trigger changes in local availability of bandwidth and its pricing. We also caution the FCC to not turn resources to this mission until other areas are reformed - such as appeal backlog, etc. - and perhaps until better information is collected from new information on the 471.

We encourage the FCC to do two things - (1) publish best practices on how to attract vendors to bid or locate vendors that serve the area as well as perhaps best practices on contract terms, etc. and (2) use the results gained from the approval process to help specific districts with high costs.

On the P2/equipment side, we agree with elimination of the database. We also believe that the FCC could help by indicating where applicants can go to find best pricing for P2 - for example a list of what state contracts may exist - just be careful not to advocate for any one vendor or contract. Ultimately, pricing goes down when there is competition - so increasing competition is the key. Vendors do not move pricing based on some list of generic bandwidth prices that will not be delivered to a specific location.

199. If we adopt such an approach, should we amend our rules so that applicants who chose a product or service at the price posted on the website would be exempt from any additional competitive bidding requirements for such purchases? We seek comment on ways to implement such a proposal. How should the office identify best terms? What criteria should the office use to filter the information?

200. We also seek comment on whether we should direct USAC to employ a team of technical experts who could assist applicants in planning and designing cost-effective networks? Is there a need for such assistance? What are the costs and benefits of housing a team of technical experts at USAC? How should such a team prioritize its work to be most beneficial to schools and libraries and help drive efficiencies in E-rate purchasing?

ENA Comments:

We are strongly against this level of involvement by the FCC. We do not believe it is warranted or likely to be successful. Various questions arise - how would SLD determine these prices - would they start getting bids for generic services in some manner - can states buy off those bids under state law - would pricing on those lists mean the vendor is now a federal contractor with significant new burdens - would vendors not on that list be able to sue for restraint of trade or anti-competitive behavior. In addition, why is SLD or FCC capable of performing this activity better than the local schools and libraries who know the vendors in their areas? The SLD and FCC have struggled just to process applications - how can they elevate to this level of involvement in

the short-term with any level of expected success? We do believe the alternative is the cost guidelines used to select outliers for testing during the 471 approval process that we have proposed. That accomplishes the same thing and allows SLD to use its research on pricing to set the guidelines for identifying high cost applications for further review. The FCC should put efforts/resources into assisting the specifically needy not generic information or mandates or incentives to use some kind of global pricelist negotiated by the FCC.

Note that there is a lot of additional value in purchasing complex services from a reputable, competent and local presence vendor that may not show up in a search for cheapest pricing. A big part of the goal is that the service works - not just that it is low cost. USAC is currently not tasked with creating policy and requires FCC input to make many decisions. How does that qualify USAC to manage such a new function? The SLD processes E-Rate applications and reviews some level of applications to determine after the fact whether costs are extraordinarily out of line. Such work does not necessarily mean that they are capable of evaluating market pricing or guiding applicants on how to find the best vendor. In addition, would the FCC be able to expand USAC's role to such a new service without some type of competitive bid process. Applicants would be challenged and likely denied funding if they expanded the type of services purchased from their service provider without a competitive purchasing process.

201. Are there entities other than the Commission or USAC that could perform this function? For example, could USAC or the Commission assemble a list of school chief information officers or other officials from better-resourced districts that could serve as advisors to smaller or lower-resourced districts? Are there other approaches the Commission should take to ensure schools are planning to efficiently and effectively meet their needs?

ENA Comments:

Every school district and library in the US likely already does this better than a brand new function created by the FCC. Applicants purchase billions of dollars of goods and services annually well beyond the small portion that is E-Rate. They also purchase billions of dollars of technology items that are not covered by E-Rate. Measuring the results of applicant purchasing processes by testing the cost per unit requested by the Form 471 is the most cost-effective way the FCC can participate in this process.

Gaining an understanding over time of where the high cost and underserved areas are will help the FCC assist specific outlier applicants to improve.

To support these efforts, recruiting actual technology people to help is a step in the right direction. However, those resources likely would be better used to gather/report best practices and to counsel specific applicants than to create an overarching pricing list. Each state has organizations of technology professionals that the FCC could meet with to gather data on needs and perhaps provide training or information to assist better purchasing and/or network performance. However, we would again recommend that FCC work to identify who might need this help through cost and bandwidth speed evaluation during the 471 approval process and be very targeted in assistance efforts. We would strongly recommend that the FCC minimize regulation for the applicants that demonstrate that they are within cost guidelines and have attained speed goals.

E. Improving the Competitive Bidding Process

202. To maximize the cost-effectiveness of purchases made using E-rate funds, we seek comment on the current competitive bidding process, and ask how the Commission can reduce the number of E-rate recipients that do not receive multiple bids, and whether the lowest corresponding price rule helps ensure that E-rate recipients receive cost-effective prices. While USAC does not collect comprehensive information about the quantity or quality of the bids received, there is anecdotal

evidence that a substantial number of E-rate applications receive one or no viable competitive bids.²⁵⁹ We seek comment on whether the current competitive bidding process typically results in multiple competitive bids, and ask commenters to elaborate on the characteristics of recipients that do not ordinarily receive multiple bids. We also seek comment on whether the current competitive bidding process continues to address the needs of the schools and libraries program, or if a different application process would better suit applicants' needs. We specifically request that commenters discuss how the current competitive bidding process and any proposed processes ensure that schools and libraries are selecting the most cost-effective services to meet their unique needs, that service providers are offering the lowest prices available, and that we continue to minimize waste, fraud, and abuse in the program.

ENA Comments:

We assert that competitive bidding following local bid rules is the best way to get the most cost-effective service. We caution the FCC that cost is not the only factor in determining service provider. Low cost and low quality does not meet the FCC goals - that is why cost-effective exists. We also do not believe the number of bidders should be a red flag - we believe the cost tests proposed for all 471s should identify outliers regardless of number of bidders. Some single bid situations are in already regulated tariff areas and therefore lowest available cost is probably being provided.

From an administrative standpoint, we believe reliance on state and local laws is enough to make sure schools are doing reasonable bids. Rely on state and local law for guidance on these matters. In addition, cost and other testing proposed in these comments should assist in identifying unusual items worthy of further review.

We assert that the following specific rules be removed as duplicative to local rules or beyond rules in place for purchases of other services. There are many FCC rules that are E-Rate specific that are not required for selling the same services to commercial customers. The value of these rules, if any, can be easily supplanted by cost per unit testing during the 471 approval process. The existence of these rules and/or forms has generated significant funding denials, appeals, delays, etc. without significantly improving the program or helping it meet its goals. In many ways these rules have decreased the cost-effectiveness and efficiency of the program in pursuit of its broadband goals.

- *Price as highest single factor in bids rule*
- *Lowest corresponding price rule*
- *Federal E-Rate Gift Rules*
- *Form 470, the 28 day requirement and related rules beyond have a valid contract under state and local law*
- *Restrictions on type of vendors that can provide certain services – much of this has been removed*
- *Letter of agency requirements for consortium bids*
- *Allow new schools or library branches to be added to existing contracts without bid if allowed by local/state law*
- *Other similar FCC rules that are beyond state and local procurement rules*

203. *FCC Form 470.* We also seek comment on how we can ensure that applicants select cost-effective services in situations in which no entity, or only one entity, responds to a FCC Form 470 posting. Under the competitive bidding requirements, eligible schools and libraries that wish to receive support for discounted services must submit an FCC Form 470 to USAC. The FCC Form 470 describes the applicant's needs and notifies service providers of the applicant's intent to contract for eligible services. After the FCC Form 470 has been posted to the Administrator's website for 28 days, the applicant may

contract for the provision of services and file an FCC Form 471, requesting discounts for the services. In some situations, however, there may be only one service provider capable of, or willing to, provide the requested service. How can we ensure that the prices for such services are reasonable, and do not waste scarce universal service funds? Should we adopt bright line rules that would impose limits on the amount of discounts available in such situations, or would that unfairly penalize applicants in areas where there are limited numbers of service providers (e.g. on Tribal lands)?

ENA Comments:

We recommend removal of the form 470 requirement and replace it with clear indication of contract end date or MTM status on the DRT. DRT is available to all vendors and the public. Combined with a more illustrative 471, that information should indicate to vendors which applicants will likely be seeking bids and what they will likely be seeking. Vendors can search out the bids directly with the applicants. The FCC should increase its reliance on local and state bid rules and allow a rebuttable presumption that those rules were followed unless specific info is presented or cost testing indicates need for additional review. This would eliminate time consuming appeals and COMADs related to things such as checking the "I don't have an RFP" box in error and then issuing an RFP (Spokane Order) and incorrect categories on 470 and bad service descriptions on the 470, etc. All of these things cause denials, appeals, and funding losses over mechanical things that are not violations of any state or local bid law.

The FCC should be looking for ways to get funding to applicants barring fraud - not cutting needed funding due to procedural issues. RFPs and bids are a tough system to be perfect – we recommend that policy needs to allow latitude for USAC/FCC to weigh the situation for real WFA before denying 100% of the funds. For example, a recent Spokane order denied on FCC reconsideration 100% of funding due to a district that issued an RFP when they checked the wrong box on the 470. Unless there is fraud involved that is not commented on in the appeal order, this seems a harsh penalty for the "crime" described in the order. Ultimately it seemed to be a good procurement. Eliminating these procedural pitfalls seems to make it easier to get money to applicants without having a lot of precedent-setting FCC decisions.

204. Currently, if an FCC Form 470 filer receives no bids, the applicant is allowed to solicit bids from service providers. Should the Commission create separate requirements for E-rate applicants that receive no bids from service providers to ensure that services are procured at reasonable prices? Are there steps we should take to avoid imposing additional administrative burdens on schools and libraries located in areas in which there is no competition for supported services, such as some Tribal lands? Are there resources available at the state or regional level that could assist these filers in finding vendors to provide E-rate-supported services at reasonable rates? For instance, we have anecdotal evidence that E-rate applicants maybe unaware of state master contracts or cooperative purchasing organizations, such as the Western States Contracting Alliance, that could be beneficial to them. Should USAC post guidance on its website or take other steps to assist E-rate applicants in finding these resources? Should applicants be required to certify that they have reviewed state master contracts before selecting a vendor?

ENA Comments:

Our proposed new cost testing during the 471 process would identify those districts for further assistance if their costs were out of line. Providing information to assist applicants would be valuable - however, the FCC should not mandate nor endorse any vendor or contract vehicle. We recommend caution as even listing state contracts could create a presumption that the FCC favors certain vendors. In addition, a

statewide contract may provide a winning rate in general, but certain areas could get better rates on their own due to timing or location. We recommend that USAC be directed to establish a test vs. a standard guideline and work with those that are above that cost threshold.

205. We also seek comment on whether the current system of applying for discounted E-rate services provides potential vendors enough information to formulate bids. We seek comment on whether the FCC Form 470 is the proper tool for adequately informing vendors of the services schools and libraries are seeking through the E-rate program. Does the format of the FCC Form 470 limit the pool of service providers seeking new business? Is the information provided on the FCC Form 470 sometimes so broad or narrow as to limit the number of vendors that could reasonably respond to the posting? The Commission has previously found that an overly broad or generic FCC Form 470 posting may stifle competition among service providers. In the *Ysleta Order*, the Commission clarified that such broad FCC Forms 470 are not consistent with our rules and that the FCC Forms 470 should mirror the level of complexity of the services and products for which discounts are being sought.

ENA Comments:

The 470 is only somewhat valuable to vendors - it provides indication that an entity may have a bid and some generic information. Vendors then have to find the RFP or talk to the entity to truly bid effectively. We advocate for removal of the 470 and add contract end date information to DRT (and/or MTM info). That would enable interested vendors to contact districts for further information and eliminate 470 timing/compliance issues.

206. Our rules require E-rate applicants to “conduct a fair and open competitive bidding process,” as spelled out in our rules.²⁶⁵ Our rules also require E-rate applicants to comply with state and local competitive bidding requirements.²⁶⁶ We seek comment on whether we should exempt certain applications or applicants from the E-rate competitive bidding rules on the basis that they are complying with state and local competitive bidding requirements. Commenters should identify the criteria they recommend using for selecting which applications or applicants should be exempt from our competitive bidding requirements, and how we can assure that such an exemption does not increase the opportunity for waste, fraud, and abuse, and, if so, what criteria should be used for any exemptions. If we adopt this exemption, should we limit it to purchases below some threshold? What should that threshold be? We seek guidance on providing USAC a practical, reliable, and minimally burdensome way to confirm that the applicants claiming such an exemption had actually complied with these procurement processes. We also seek comment on what USAC should consider as sufficient documentation of compliance with state or local procurement rules. Further, we seek comment on whether we might consider a *de minimis* exemption. For example, if an applicant’s total annual E-rate purchases fall below some minimal threshold, should that applicant be exempt from the competitive bidding requirements? What should that threshold be?

ENA Comments:

Services should be exempt from competitive bidding if they are exempt under local procurement laws - typically a low dollar threshold. With the elimination of the 470, bids done in compliance with state and local laws should qualify as eligible for purchase under E-Rate. This would eliminate issues with contracts bid without a 470 being ineligible.

MTM contracts should be able to be renewed without bid as long as cost remains within guidelines and such renewal is compliant with state law.

Compliance with state and local procurement laws should be a certification with further testing done based on outlier identification during the approval process and during audits/BCAP. Basically, if the school is fitting within the cost guidelines and meeting the bandwidth goals no further work should be done on this topic unless the district is part of the statistical sample picked for testing and then further procedures like selective review.

207. Many states negotiate state master services agreements (State MSAs) for services eligible for E-rate support. Should we allow applicants to purchase off a State MSA without the applicant or the State MSA having gone through our competitive bidding process? What are the benefits and burdens of such an approach? If a State MSA offers purchasing options for the same or functionally equivalent products or services at different prices, should we require an applicant select the lowest price offering if it wants to select off the State MSA and be exempt from our competitive bidding rules? In the alternative, under such circumstances should we require applicants to follow currently required process and evaluate all the options on the State MSA using price as the primary factor in selecting a vendor? We note that some State MSAs do not contain specific prices for goods and services, under those circumstances we would not be inclined to provide E-rate support for goods and services purchased off a State MSA, and we seek comment on that issue.

ENA Comments:

With the removal of the 470, districts should be able to select a State MSA as its service provider without that contract having been under a 470. State and local purchasing law would have to be followed and the cost of using that contract would be subject to cost per unit testing as part of the 471 approval process.

209. *Lowest Corresponding Price (LCP).* We also seek comment on the extent to which the LCP rule helps ensure that service providers charge cost-effective prices. In section II.B.2, we sought comment on using the LCP rule to measure progress towards our proposed goal of ensuring applicants have affordable access to broadband. The LCP rule requires service providers to charge the lowest price that a service provider charges to non-residential customers that are similarly situated to a particular E-rate applicant for similar services.²⁶⁸ We specifically seek comment on the role of the lowest corresponding price rule for competitive bidding. If an applicant receives only one bid or no bid for services should the applicant be required to report that fact to USAC? If an applicant receives only one bid or no bids, should USAC automatically engage in additional review of the application to determine whether the service provider has offered the lowest corresponding price? Or, should USAC only do additional review under those circumstances if the price for the service at issue is flagged as higher than similar services? If USAC should conduct further pre-commitment review for compliance with the LCP rule, what is the least burdensome but effective method for determining whether the service provider is offering the LCP?

ENA Comments:

Use of the proposed cost standards to select outliers will handle the issue of one or no bidders and high costs. If there is one or no bidder and the cost requested is within guidelines that seems to create a reasonable presumption that the applicant found an acceptable solution despite lack of vendor interest or competitive availability. Basis for pricing in one bidder high cost areas can be evaluated on a case by case basis which could include LCP questions if evidence is uncovered that local market prices are lower for similarly located customers. There is no value in wholesale LCP testing if pricing is within guidelines or is explainable.

In addition, we believe the added burden of LCP is unnecessary if cost per unit testing during the 471

process is adopted. In that circumstance, high costs would be identified and researched. LCP type issues would be discovered in that manner. In addition, the LCP requirements do not appear to be applicable to any other business segment other than E-Rate. Such a burden on a subset of business is very problematic for larger providers of multiple populations. Therefore, we recommend that LCP be eliminated..

210. We also seek comment on the clarity of the LCP rule. In 2010, US Telecom and CTIA (together Petitioners) petitioned the Commission to issue a declaratory ruling to clarify the scope and meaning of the Commission's LCP rule.²⁶⁹ More specifically, Petitioners requested that the Commission clarify that: (1) the lowest corresponding price obligation applies only to competitive bids submitted by a provider in response to a Form 470; (2) the lowest corresponding price obligation is not a continuing obligation that entitles a school or library to constantly recalculate the lowest corresponding price during the term of a contract; (3) there are no specific procedures that a service provider must use to ensure compliance with the lowest corresponding price obligation; (4) in determining whether a service bundle complies with the lowest corresponding price obligation, discrete elements in such bundles need not be individually compared and priced; and (5) in a challenge regarding whether a provider's bid satisfies the lowest corresponding price obligation, the initial burden falls on the challenger (*i.e.*, a school or library) to demonstrate a *prima facie* case that the bid is not the lowest corresponding price.²⁷⁰ The Commission sought comment on that petition,²⁷¹ and we now invite commenters to refresh the record on whether it is necessary to clarify the scope and meaning of the LCP rule.

ENA Comments:

In the event that our earlier comments advocating removal of the LCP rule is not adopted, we provide these specific comments –

Our perspective mainly relates to bandwidth - which is the main focus of the E-Rate program - and LCP is a problematic rule for cost-efficiency in bandwidth. Historical P2 services and other non- location sensitive P1 services are easier to implement LCP - i.e. one price list for all. LCP creates more pain for the program than it is worth by adding an additional layer of complexity to providing service to schools that does not exist for other customers. This rule increases the barriers to entry for new or smaller vendors who serve a local territory. Competition and price review should rule, not arbitrary comparison across a likely diverse set of customers and locations.

LCP meaning is quite unclear and could have a huge negative effect in getting broadband to harder to reach customers. We support the comments of the Petitioners. We further suggest that similarly situated for purposes of fiber and other distance intensive services be more clearly stated to allow for price variations due to mileage, build, etc. To force any situation with different buildout, distance and other local factors to require FCC approval will run numerous competitors out of the program and doom the program to higher costs or unavailable service. The FCC should focus on encouraging competition which will control prices - not unclear regulation like LCP.

LCP should focus mainly on clear cases of identically situated customers receiving different pricing. Volume based discounts should also be allowed versus one-off delivery. LCP also has the unintended consequence of making it difficult to lower pricing due to specific local factors for fear that it could trigger repricing requirements in other markets artificially considered "similar" by FCC standards.

The better alternative is to measure specific pricing paid by schools and libraries, compare that pricing to a guideline and review the outliers. LCP is a good rule only for the purpose of punishing a vendor who willfully charges schools and libraries more than identical cost customers in the same area - and such punishment should only be allowed based on clear evidence of intentional misconduct. LCP taken to its extreme is more burdensome and onerous than is required in any other sale transaction for bandwidth

and so therefore, it could contribute to lower interest in schools and library business. For example if you serve numerous non K12 properties in an area that are not regulated by other than competition, would you be willing to take on a significant additional regulatory issue of LCP just to serve the neighboring school?

F. Efficient Use of Funding

212. This is not the first time the Commission has sought comment on this issue. In the 2003 *Schools and Libraries Third Report and Order*, the Commission sought comment on whether to codify additional rules to ensure that applicants make informed and reasonable decisions in deciding which services they will seek discounts.²⁷³ Given that demand for E-rate funding greatly exceeds the cap and that there is a wide disparity in the amount of funds on a per-student basis that applicants seek, it is time to refresh the record on this issue. Specifically, we seek comment on how to ensure that applicants are not receiving support for expensive services that provide functionality that they do not need and will not use and that applicants are not selecting expensive priority one services simply because they are supported services, when less expensive services would fill the same need.

ENA Comments:

We believe that by gathering key data during 471 process - cost, speed, students – USAC/FCC can use comparisons and initial cost guidelines to select which FRNs are outliers warranting review which should uncover issues as discussed in this paragraph. As an aside, the FCC should be wary of calculating per student costs without speed information. A state that has an average speed of 10 Mbps might be less expensive than one averaging 100 Mbps - but the 100 Mbps is the level the program is trying to reach. New data is needed from the process that has both speeds and cost as part of 471 filing.

213. As part of our effort to ensure that applicants are making cost-effective purchasing decisions, we seek to refresh the record on whether we should adopt bright line tests, benchmark or formula for determining the most cost-effective means of meeting an applicant's technology needs. For example, should we establish limits or guidelines on purchases of certain kinds of equipment based on reasonable per-classroom, per-teacher, or per-library technology needs? If so, what are appropriate bright line tests, benchmarks or formulas? Would we need a process for granting exceptions, and if so, how should it work? As an alternative to setting hard limits, should we make purchases of equipment above per-classroom, per-teacher, per-student, or other limits a lower priority?

ENA Comments:

Initial cost per unit and cost per student guidelines should be developed to allow outliers to be selected for review. These should not be considered caps as information is too incomplete to try to restrict at this point. Non outliers can receive automatic approval (if not selected for statistical sample testing) – speeding availability of funding for educational uses and freeing up USAC staff to work on outliers. Outliers would then get cleared (or denied) through review - if cost is consistent but high, can be cleared with local factors driving cost for example.

214. Our rules require that an applicant establish that equipment and services are installed and in use. Should we require that an applicant regularly use all of the functions provided by an E-rate supported service? If an applicant has requested and installed an E-rate supported service, but does not

use all of the functionality of the service, has the applicant violated the requirement to engage in cost-effective purchasing? Does it matter if no other vendor services more closely matched the needs of the applicant?

ENA Comments:

Situations where applicants are purchasing extra services should be discovered in the review metric as the cost points will be too high. For those selected for review: Applicants should not be penalized based on not using all features if they selected the most cost-effective solution regardless of those features. There can be many situations where a package of features is offered for a lower price than you can buy just the specific features that you may want. However, the RFP process typically minimizes those situations.

215. We seek comment on whether applicants seek support for priority one services because they know they will receive support for those services, when in reality the services they need or are seeking are unsupported services, or priority two services that are often not funded. We noted above that many applicants purchase expensive cellular data plans and air cards that are funded as priority one services, instead of using less expensive local area network (LAN) services, which are priority two services. Is this an example of applicants seeking support for priority one services because they do not expect to qualify for priority two services, given the E-rate program's funding cap? Are there other examples of such practices? How can the Commission discourage these practices and encourage participants to select the less expensive services? Would the proposals discussed above to reprioritize the E-rate supported services help address this issue?

ENA Comments:

This should be detected by the proposed 471 testing and reviewed. Cell data cards are the only area where this type of issue may be occurring to the best of our knowledge. We believe there may be portability issues that create the desire for this higher cost service. That is, schools want a solution students can take home - like data cards - but are not allocating much of the cost to home usage/ineligible. There is a premium being paid for portability not offered by other solutions that are less expensive even without E-Rate like purchased WAPs or managed Wi-Fi options. Data cards seem to be an issue where the cost allocation should lean toward only letting the district get E-Rate on the equivalent cost of an on-premise solution (assuming rule changes allow those solutions to be E-Rate eligible). If those solutions are not eligible due to fund size restrictions on P2, then none of this solution would be eligible. In addition, to the extent that the wireless cards monthly service is for duplicated internet access, more may have to be allocated to ineligible since the need for the internet access is only for off campus.

216. We seek comment on how our cost-effectiveness rules should apply to multi-year contracts and to purchases of ongoing services. Should we encourage or require schools and libraries to take a long-term view of cost-effectiveness? How can we provide E-rate applicants assurance that significant investments which raise costs in the short term but significantly lower recurring costs will not run afoul of our rules, while continuing to protect against wasteful or inefficient purchases? We are particularly interested in this question as it relates to the deployment of new broadband connections to schools and libraries.

ENA Comments:

These items should kick out when cost is evaluated for Internet Access - review of cost per year should show that the cost is ultimately lower and therefore, potentially fundable. If the longer term high up-front cost won the bid and the district can invest the local portion, it seems that the program should try to accept. Funding issues as described earlier in our comments may make it unfeasible to fund such

upfront payment requests.

G. Broadband Planning and Use

217. We next seek comment on measures E-rate applicants should take in order to ensure they are carefully assessing their need for and readiness to use high-capacity broadband. Should we require schools and libraries seeking support for high-capacity broadband to undertake a formal review and assessment of their broadband needs – both to the premises and within the premises? Such an assessment could not only help applicants determine their broadband connectivity needs but also encourage efficient and cost-effective purchasing decisions. Should we condition receipt of E-rate funds on certain criteria for the broadband assessments and if so, what should those criteria be? For example, should we require schools to plan for providing a device to every student or for a device to a small group of students?

Should we require schools and libraries to conduct professional development sufficient to ensure that their staffs have the knowledge and skills to take advantage of high-capacity broadband as well as the devices and applications? Should applicants be required to demonstrate that they have specific plans for using the bandwidth? Who is in the best position to evaluate and, if necessary, approve these assessments, and help schools close any gaps? What should be the consequences be if an applicant conducts inadequate needs assessment and planning, and what resources could be made available to help them improve?

218. In the *Schools and Libraries Sixth Report and Order*, the Commission eliminated technology plan requirements for E-rate applicants seeking only support for priority one services in order to simplify the application process for those schools and libraries.²⁷⁷ We seek comment on lessons learned from our current and previous technology plan requirements and whether we should consider any elements of those requirements if we implement a broadband assessment requirement. In particular, how can we make such assessment as simple and objective as possible? Is an objective checklist or scorecard approach for school planning and readiness feasible?

219. We seek comment on quantifying the burdens schools and libraries face when completing current technology plans in compliance with federal requirements and the approval process? If we eliminate the technology plan requirement, and do not otherwise require E-rate applicants to assess their broadband needs, would schools and libraries continue to develop technology plans, or their equivalents, and if so how might they differ from current plans developed in order to access priority two funding?

ENA Comments:

The FCC currently relies on anecdotal information from school systems to indicate that they need more broadband, but now considers expensive broadband assessments from third parties to justify that broadband? We believe the FCC needs to accept that in the near term school systems actually need the bandwidth that has been recommended in the National Broadband Plan, the SETDA report, the two national assessment coalition requirements, ConnectED, etc. There is no need to assess whether broadband is needed - it is. Making available best practices across the E-Rate world for networking and contracting is the best way to support local districts improvement. Providing consequences to districts that cannot adequately do an assessment is counter-productive. The proposed streamlined approval system will generate a list of entities that need help that will keep the program occupied for several years without the need for any additional sophistication. Low hanging fruit will be prevalent and most valuable to the program to make improvements. We believe the FCC can reasonably assert that schools

and libraries that hit the marks for bandwidth goals and cost/unit goals are planning adequately and focus resources on the outliers to see where help, not punishment, might generate improvement. We do not recommend reinstating E-Rate required tech plans or broadband evaluations. Those sound innovative, but are costly and we believe simple measurements of speed and cost will show that most do not need the extra help (or if it shows that they do, then the FCC should revisit these proposals). We would recommend that all separate E-Rate rules regarding tech plans be eliminated with the knowledge that tech planning is required by many other state and federal programs already. In addition, review of outliers can include asking systems about their tech planning as part of the goal to assist applicants in better E-Rate purchasing and network decisions. Tech plan should not be an item that creates a loss of funding, absent fraud.

H. Innovative Approaches to Encouraging Maximum Efficiency

220. Finally, as we consider various ways to maximize cost-effective purchasing in the E-rate program, we seek comment on whether utilizing scaled down testing of various approaches to purchasing would help identify the most successful practices as well as less effective ideas. Towards that end, we seek comment on whether we should establish one or more programs to foster innovation and highlight specific, scalable best practices for purchasing E-rate supported services that eligible schools and libraries can use to drive down the cost of E-rate supported services.

221. Such a program could, for example, allow experimentation use of consortia, establish novel bulk buying opportunities, and/or test ways to streamline procurement for eligible schools and libraries. A pilot program could also provide an opportunity for the Commission and USAC to gather data about other innovative approaches to lowering costs by incenting cost-reducing measures. Pilots could, for example, offer greater discounts for participants that are able to significantly decrease the pre-discount costs of the services they purchase. This would allow participants to realize a greater share of the savings from cost-reductions. Alternatively, we could allow pilot participants to use savings from reduced spending on priority one services toward priority two services, outside the otherwise applicable prioritization system.

ENA Comments:

At this point in the reform process, we don't believe the SLD and FCC have time or resources to create new initiatives in this area nor the data to truly know if they are needed or valuable. We would encourage other reforms first including streamlining the approval process, catching up on appeals, etc. Some of the simplifications may allow more time on task for better bids. We are ultimately in favor of the FCC/SLD coordinating best practices information to support local efforts - but not in favor of FCC mandates or detailed oversight of the process. We recommend that the FCC use the statistics gained from 471 changes to see where the issues are before trying to fix them. In addition, pilot programs or other incentives that go to those who now reduce costs are unfair to those who already have purchased wisely. You have to have bad purchasing to get big savings. There is already an incentive - less cost to the district meaning more budget to spend elsewhere. No need for further incentive. In addition, this assumes that cost alone is the best measure. Quality of service is also a major consideration (and should be) in most competitive processes.

222. We seek comment on these options for pilot programs, and whether such programs would be an efficient use of E-rate funds. We also seek comment on other potential pilot designs, and other potential financial and administrative incentives for participation in purchasing pilot programs. How can we set up these incentives to account for the fact that some short-term investments may result in long-term cost savings? Are there other approaches we should consider to incentivize eligible

schools and libraries to find the lowest price? Should we consider adopting any of the pilot program proposals discussed above for the E-rate program as a whole, without first conducting a pilot?

ENA Comments:

At this point, the E-Rate data is too muddy to see the true picture - better simple data captured over time can indicate where FCC assistance could be valuable. Asking for pilot program volunteers is unlikely to result in a pilot that includes districts that need help the most, but rather those who are most sophisticated already. We would prefer a new review process that includes identifying outliers that need support to reduce cost and then providing them tools to get better - maybe a pilot for the top 5% of unusual cost districts or similar.

223. We also seek comment on what data we should collect as part of a pilot program, and to measure the effectiveness of the program. In evaluating the results of any pilot program, we would propose to consider, among other things, the quantity of services supplied, the prices per component, the expenses per-student, and the distribution of cost across districts of varying incomes. Are the other factors we should consider? What would be the most appropriate mechanism for sharing this data? How would we maximize the likelihood that any innovations developed in a pilot program could be repeated throughout the country?

ENA Comments:

The cost of bandwidth varies widely from state to state and community to community. Comparison of simple measures such as cost/unit including cost per student and cost per Mbps are the best ways to identify top applicants that need assistance to control costs. Gathering more detailed data on a sample or pilot does not necessarily translate across to other districts. Perhaps there are some best practices that could be shared, but they are likely to be mechanical - such as make sure to get all possible providers to bid, make your RFP open to different ways to deliver the solution, include a best and final offer style option to push best scored vendors to even lower pricing before final decision, etc. These are not really purchasing innovations. They are simple recommendations that in some situations could drive savings.

V. STREAMLINING THE ADMINISTRATION OF THE E-RATE PROGRAM

A. Electronic Filing of FCC Forms and Correspondence

227. To enable USAC to manage applications more quickly and efficiently, we first propose to require all E-rate applicants and service providers to file all documents, including the FCC Form 500, with USAC electronically and to require USAC to make all notifications electronically. We seek comment on this proposal.

228. While many applicants file a majority of the forms online, many other E-rate program procedures, such as service provider identification number (SPIN) changes, invoice and service delivery deadline extension requests, as well as the FCC Form 500, require paper submissions, some of which must be filled out by hand.²⁸¹ When the E-rate program began, some schools and libraries did not have Internet access, thus many applicants did not have the resources to file electronically.²⁸² Today, however, the vast majority of schools and libraries have Internet access, and – just as we now require E-rate service providers receiving disbursements to use electronic payment systems²⁸³ – we propose to require electronic filing and notification of the receipt of E-rate forms. As the Commission previously concluded, the electronic submission of the FCC forms will improve the efficiency of submitting and processing applications, thereby resulting in faster commitments and disbursements of E-rate funding as

well as the return of any unused funds to USAC.²⁸⁴ It will also reduce USAC's administrative costs because USAC will not have to manually enter data into its electronic system from paper submissions.²⁸⁵ Additionally, electronic completion, submission, and notification will likely result in fewer errors on the forms and other communication with USAC and to applicants.²⁸⁶ In proposing to make all forms and correspondence filed with and received by USAC electronic, we recognize that there may be rare instances in which some applicants may still need to file and receive paper forms due to unreliable Internet access or emergency situations. We therefore seek comment on whether we should impose a minimal fee for applicants who seek to file their forms and correspondence in paper form.

229. SECA suggests that all of an applicant's forms and correspondence with USAC should be available from a centralized portal so the applicant can retrieve current and prior years' information to use as a starting point for new form submissions.²⁸⁷ SECA states that online functionality will conserve on data entry and problem resolution resources that USAC currently must utilize as well as customer service bureau inquiries.²⁸⁸ Facilitating access to previous applications will also make it easier for applicants to file forms that are similar to those of previous years and eliminate the duplicative requests for information during PIA review since all the requested information would be available online and available for review.²⁸⁹ We seek comment on SECA's proposal and any alternative ways to simplify the submission and receipt of FCC forms and other correspondence to USAC. Another way to increase E-rate program efficiencies is automate more of the processes for the program. In addition to requiring online filing, we seek comment on whether there are administrative processes in the program that could be automated and would also result in cost savings and efficiencies. What could be gained by increasing the amount of automated processes at USAC and how could this be best achieved? For example, would increased automation in the application process result in quicker commitment decisions? What aspects of this process lend themselves to automation? What are the ways that increased automation can lead to efficiencies and cost savings? What are the ways automation could reduce or eliminate improper payments? Commenters should be as specific as possible in their proposals.

230. Requiring all forms and correspondence to be available electronically may require USAC to upgrade its internal technology systems in order to accommodate additional electronic submissions and increased automation which could result in initial increased expenditures for the E-rate program. We seek comment on whether the administrative and economic benefits that would result from these changes outweigh any initial upfront costs that would be required for the technological upgrades proposed herein. We note that USAC has already sought public comment on measures to update its internal informal technology systems to improve operational efficiencies and enhance the customer experience.²⁹⁰ We therefore direct USAC to incorporate into its consideration this proposal as it adopts measures to improve operational efficiencies.

231. Other than time and resource efficiencies gained for both applicants and USAC, we estimate that several of these proposals will result in actual cost savings for the E-rate program. While it is difficult to quantify the aggregate total savings to the E-rate program as result of these proposals, according to USAC's annual report for 2012, USAC spent approximately \$70 million on E-rate program operating expenses in 2012.²⁹¹ Any reduction in these costs as a result of changes such as electronic filing and increased automation of program processes would result in increased funding availability for applicants, especially when considered in combination with the other changes proposed herein such as elimination of funding for certain services.

ENA Comments:

Mandatory electronic filing is OK. That is the way most applications and forms are trending. Providing access to prior year filings is key to our proposed statistical review methodology for 471 approval testing. Other automation should be based on the net results of enacted reforms - i.e. no need to automate that which will go away - and we recommend removal of a large number of steps. Any correspondence from and to USAC should become paperless as well. Getting electronic copy and paper copy today is wasteful (and only done in an attempt to start deadline clocks).

B. Increasing the Transparency of USAC's Processes

232. We seek comment on ways to increase transparency throughout the application, commitment and disbursement processes, so that applicants have a better understanding of the status of their funding requests. SECA suggests, among other things, that the longer a decision is pending, the more status update information should be made available on USAC's website to the affected parties.²⁹² SECA therefore proposes that USAC should provide additional levels of detail in its "Application Status" tool on its website to provide applicants with a better understanding of where their application is in the review process.²⁹³ For example, SECA suggests additional designations, such as "Normal Review," "Selective Review," "Policy Review," "Investigative Review," and "Pending Program Decision on Available Internal Connection Funding."²⁹⁴ Additionally, in cases where USAC is waiting for an applicant submission, it could indicate as part of the application status that it is "awaiting applicant's response to USAC's request on [date]." We seek comment on SECA's proposal and other ways in which to increase transparency of the review process for applicants.

ENA Comments:

We are in favor of more detail on the status tool - although investigative review may not be something anyone wants on a public website. I also think the due date might be overkill as long as the FCC relaxes the penalties associated with missing deadlines - which should be done - no applicant (the customer) should be denied funding solely due to not answering questions quickly enough.

Another way to add transparency is for the FCC to order a culture shift at the SLD and actually allow CSB and/or PIA to just tell the applicant what the status is when they ask. That would probably build more trust and increase speed of review more than anything.

From an automation standpoint, we would encourage the integration of the status tool with the DRT. Our small in-house staff has been able to automate gathering that data for multiple applicants at once (and combining it with DRT info) and the SLD should be able to do that as well.

C. Speeding Review of Applications, Commitment Decisions, and Funding Disbursement

233. We next seek comment on ways to reduce the time it takes USAC to review applications for E-rate support in order to more quickly release funding commitment decisions. Currently, applications can undergo a number of levels of review prior to release of funding commitment decisions.²⁹⁵ We note that, in a recent report, GAO recommended that the Commission undertake a risk assessment of the E-rate program.²⁹⁶ GAO noted that a risk assessment involving a critical examination of the program could help determine whether modifications to USAC's business practices and internal control structure are needed to appropriately address the risks identified and better align program resources to risks.²⁹⁷ In addition, applicants have found that USAC's review process can become time-consuming and can significantly delay funding commitment decisions, particularly for state networks and consortia that may file numerous funding requests per funding year. At the same time, the Commission has directed USAC to ensure that funding is disbursed to eligible recipients for eligible

services. For all the suggestions below, given that we must balance administrative efficiency with protecting against waste, fraud, and abuse, we also seek comment on how we should ensure that streamlining the application and disbursement process does not then result in an increase in improper payments.

ENA Comments:

Statistical sampling is used for evaluation purposes across a wide range of applications – including, we believe, the USAC invoicing process. We believe application of certain dollar-based tests coupled with minimum processing standard tests should be adequate to pass a large percentage of applications immediately to approved without added risk to the program. PIA review would be revised to focus on the outliers that were outside the dollar-based test norms, entities that were flagged by SLD for higher scrutiny and a statistically valid sample of the remainder. For example, if we had 46,000 applications and 6,000 were moved out due to standards-based testing or other reasons, we would have approximately 40,000 applications in the sampling pool. To get a 99% confidence level with a 2% confidence interval (a very high level of statistical confidence), you would need to test approximately 4,000 additional applications for compliance. That would mean USAC could immediately release the FCDL for the other 36,000 as approved based on automated standard testing – without manual intervention.

Standard automated testing should include:

- 1. Current year dollar amount vs. prior year dollar amount - more than 30% increase would require manual review and*
- 2. Cost per unit testing (for example – cost per Mbps for bandwidth/Internet Access) – applications with cost per unit above a standard threshold would require manual review*

For those pulled into the outlier category, PIA should be designed in general to reasonably determine why the outlier factor or factors are acceptable - for example - a remote Alaskan school district might fail the cost test but pass the prior year test. PIA could pass that application without customer contact based on known high cost data and consistency with prior year.

We believe this process would identify the real outliers that hit the program very hard each year and eliminate delays for the vast majority that have no issues.

To account for waves starting immediately, the sampling could be done on a batch basis prior to the filing window deadline using an expected sampling percentage. So if we expected the sample size to be 30,000 which generates about a 10% requirement, SLD would sample 50 of the initial 500 for further review before approval in addition to any that would be reviewed due to high cost or other issues.

234. We seek comment on whether we should establish deadlines for USAC to issue funding decisions or complete its other processing tasks. We describe above the reporting requirements in which USAC must detail performance related to commitments, disbursements, and appeals.²⁹⁸ If commenters support deadlines, what should those deadlines be? If so, how should we balance speeding the review with protecting against improper payments and waste, fraud and abuse? Commenters should specifically address how the deadlines might improve or harm the application and invoicing processes. What should happen if USAC cannot meet the established deadlines?

ENA Comments:

We believe a deadline for FCDL system should be implemented whereby USAC must report status on each

delayed application as of each deadline. We would suggest, if the sampling method is accepted, that the first year deadline would be 9/30 with subsequent reporting deadlines on 12/31 and quarterly thereafter. A report to the FCC should be filed for anything that is delayed past 12/31. For subsequent years we would like the initial deadline to move to 7/31 and then to 7/1 and ultimately to 4/1. 4/1 seems aggressive but new broadband requires at least three months to install. Another way to implement this is to impose a dollar based goal at each date. For example 50% of dollars by 7/1, 75% by 9/30, etc. with full reporting on 12/31 of the pending items.

We would recommend that the reporting medium be the DRT for the first report and then a letter for subsequent quarterly reporting. The DRT report would be a new field similar to the funding commitment comment field.

235. In addition, we seek comment on ways to expedite the application review process. Are there ways in which USAC can streamline the PIA review process so that applicants are not asked duplicative questions or asked for the same documentation for different applications or funding requests where previous responses or documentation are applicable? Commenters should provide specific examples of the problems they encounter during the application review process, including identifying specific duplicative requests made in the routine review process.

ENA Comments:

Access to prior year information seems to be limited - that could be improved. Allowance of prior year answers to be adequate for current year would be a valuable improvement. For example, if a site was tested the previous year and acceptable, then PIA could accept that and move on - or ask a question regarding whether anything has changed.

236. Additionally, at times, an entire application or groups of applications involving funding requests for different service providers may be held up pending resolution of one FRN for one provider. Are there changes that should be put in place so that other unrelated funding requests are not held up pending the resolution of an issue involving another FRN? SECA proposes that, absent an active criminal investigation in which the party is the subject, within 90 days of the lack of activity on an FCC Form 471 application or invoice, USAC should notify all affected parties of concerns that are holding up a decision on the application and submit detailed requests for any additional documentation or information as part of the notification.²⁹⁹ Upon receipt of the requested information, SECA proposes that USAC should issue a decision within 90 days.³⁰⁰ We seek comment on this proposal and any other proposals setting

timeframes for resolution of applications and release of funding commitments. If we were to adopt a deadline by which USAC must act, under what circumstances should we permit USAC to exceed the deadline in order to give full consideration to the application?

ENA Comments:

We believe most of the issues causing one FRN to be held because of another - absent good reason - has been cleared up with systems work. That should continue to be a criteria of some of the simplification - can the information be separated and acted on FRN by FRN - with the right systems it can be - but we also have to acknowledge system limitations that only USAC is privy to.

We are generally supportive of the SECA comment regarding information and questions in 90 days. We believe the general concepts proposed above will facilitate more immediate focus on applications that need review and minimize the routine reviews - inherently speeding the process

dramatically without sacrificing WFA controls.

237. Further, for USAC to more quickly release funding commitment decisions, should we limit the number of opportunities applicants are given to respond to USAC's requests for documents and clarification? As part of its review, USAC routinely gives applicants additional time to provide missing or incomplete information to USAC during PIA review.³⁰¹ When applicants' timely request an extension of time to submit documentation, USAC grants such extensions and gives applicants additional time to respond to their requests for information.³⁰² The Commission has granted waivers of the E-rate rules providing applicants with additional time to submit documentation to USAC.³⁰³ These extensions of time also delay USAC's application review process and ultimately hinder the prompt release of funding commitment decisions. We thus seek comment on whether to limit the number of opportunities and length of time that applicants have to submit complete information to USAC in response to USAC's requests. Commenter's should specifically indicate any potential problems that may arise if we reduce the window of opportunity and any concerns with modifying USAC's outreach to gain complete information to complete their review of pending FCC Form 471 applications.

ENA Comments:

We recommend that additional burdens not be added to the applicants. If the applicant cannot meet a deadline, just move them to the back of the line. That encourages compliance but removes the denials for lack of timely response - which are not in the program's best interests.

Applicant caused delays should be tolerated as the program is designed ultimately to support the applicants. There should be a drop dead date at some point to allow closure if no response is received, but it should be very late in the program year.

We would also recommend eliminating the RAL and RNL and encourage use of DRT and online view of 471 to determine what has been processed. We would recommend that any changes to forms can be done during PIA except for increasing dollar amounts filed.

238. Are there current cost-allocation challenges that impose undue burdens on applicants and on USAC that could be removed? For example, some states do not include preschool within their definition of elementary schools. In such states, preschool classrooms are therefore currently not eligible to receive support for E-rate services, even when those preschool classrooms are located within an elementary school building that otherwise receives E-rate supported services.³⁰⁴ As a result, in such states, applicants must cost-allocate the expenses for providing E-rate supported services to preschool classrooms, and exclude those expenses from requests for E-rate support. Consistent with the Commission's allowance for the community use of E-rate services,³⁰⁵ would an exception for these classrooms improve the efficient use of E-rate eligible services and reduce the administrative burden? Are those costs typically so small that the burden of cost allocation and administrative review outweigh the benefit to the Fund of requiring cost-allocation? Commenters should be specific in their proposals.

ENA Comments:

Applicants receive far too much time consuming scrutiny of potential Pre-K and Adult Ed usage of resources. Unless the facility is solely for non-K-12 usage, we believe an exception should be made to allow that small level of usage as it supports the E-Rate mission given that the school district has approved those students at their schools. This would reduce a huge administrative burden with costs that definitely outweigh any recovery value.

In addition to Pre-K, the SLD currently spends a significant amount of time asking about closed entities. It should be sufficient to ask a general question to those sampled and outliers - have any entities closed? - otherwise the administrative cost of digging through this exceeds the value to the program. The limited amount of funding that may be approved related to closed sites does not mean that applicants and vendors will bill for those sites. In addition, tracking the students from the closed schools to their new schools should not be required unless there is a significant (say 20%) change in entities served. The likelihood of discount rate change is very limited and will not be a factor when we begin using one rate for the whole district. In addition, districts should not have to provide Board minutes or other data to prove a school is still open. Their certification should be adequate. This is again an area where a lot of effort is being spent for limited value. Previously purchased internal connections for closed schools should be allowed to transfer to other district schools without penalty.

New schools should be added to 471 at any point post 471 without penalty – including during invoicing review, PQA, audit or BCAP (but without additional dollars). PIA should be allowed to make any requested changes to data on form except for increasing dollar amounts.

239. **Multi-year contracts.** E-rate applicants are permitted to enter into multi-year contracts, but applicants with multi-year contracts must file an FCC Form 471 application and go through the same review process every year.³⁰⁶ Our rules prohibit USAC from issuing multi-year funding commitments in the E-rate program.³⁰⁷ Stakeholders have argued that it is a waste of an applicant's time to file an application for the same services year after year, and that it is a waste of USAC's time to review the same applications year after year.³⁰⁸

240. We agree with stakeholders that multi-year contracts have the potential to drive down service costs, provide more certainty, and that we should minimize duplicative application review by USAC. At the same time, given the dynamic marketplace for many E-rate supported services, it is important that E-rate applicants not bind themselves to multi-year contracts that require applicants to pay prices that are higher than they would receive had they re-sought competitive bids. In balancing those issues, we seek comment on a number of changes to our handling of multi-year contracts.

241. First, we propose that, absent a change in the contract, service provider or recipients of service, we allow E-rate applicants with multi-year contracts that are no more than three years in length (including any voluntary extensions) to file a single FCC Form 471 application for the funding year in which the contract commences and go through the full review process just one time for each such multi-year contracts. We seek comment on this proposal, and on what additional steps E-rate applicants should have to take in the second and third year of such contracts to confirm their request for E-rate support for the subsequent years. We specifically seek comment on the following proposed rule language:

Multi-year contracts. An eligible school, library or consortium that includes an eligible school or library seeking to receive discounts under this subpart may submit to USAC a single FCC Form 471 covering all the years of a multi-year contract, provided that the term of the contract including extensions, does not exceed three years. An FCC Form 471 covering a multi-year contract must be submitted to USAC before the start of the first funding year covered by the multi-year contract.

242. Second, we seek comment on amending our rules to permit multi-year commitments in the E-rate program. In the *Healthcare Connect Fund Order*, we allowed applicants to request a funding commitment for a multi-year contract that covers up to three years of funding.³⁰⁹ Unlike the E-rate program, however, the universal service rural health care program is not currently oversubscribed, so it

is more feasible for that program to issue multi-year commitments. Is this difference relevant to our handling of multi-year commitments? Should multi-year funding commitments in E-rate be conditional on the funds being available in subsequent years?

ENA Comments:

We are in general supportive of a process that allows multi-year contracts some level of multi-year approval. However, if we simplify the program in the manner proposed, there would be little value to this change. One of the first things to note is that most multi-year contracts have different dollar values year over year - so an applicant is going to have to report a new amount each year. In addition, having the FCC arbitrarily allow this only for three year no renewal contracts is a restriction that will not necessarily make this popular nor most cost-effective. Schools should have the ability to follow state and local law when setting their contract lengths and renewal terms. Some projects return best if they are 7 to 10 years in length and some are better with short-term contracts. This selection should be a local decision not regulated by the FCC. (The FCC could suggest best practices; however, bandwidth is such a locally driven cost that practices in other areas are only rarely applicable).

243. Finally we seek comment on whether we should impose any additional or different limits on multi-year contracts. For example, should we limit the maximum term (including voluntary extensions) of multi-year contracts that E-rate applicants may enter into for E-rate supported services to three years? What are the typical terms for multi-year contracts now? What are the typical terms for comparable enterprise services in broader business broadband markets?

ENA Comments:

We strongly oppose the FCC determining what length of contract is allowable for any local district. Testing standards can be revised and outliers can be identified, which would shine the light on any bad contracts. Contracts for new build typically require at least five years to effectively amortize the cost to build the connectivity.

244. Should the maximum term of a contract for E-rate supported services depend on the type of service at issue? For example, the efficient term for an IRU in dark fiber may be longer than for Internet access services. Indeed, where significant new fiber builds are involved, long-term contracts could be critical to keeping recurring costs low. When fiber is laid for the first time to a school or library, an applicant may be able to seek bids that guarantee low ongoing costs once the initial construction is paid for. If an applicant is prohibited from entering a long-term contract when the fiber is first laid, it may be unable to claim similar efficiencies. We seek comment on this analysis.

ENA Comments:

We believe the local applicants should make these decisions based on bids they receive. The FCC could probably help most by providing best practice ideas on how to develop bids that can evaluate multiple types of connectivity platforms (leased dark fiber, owned dark fiber, leased lit fiber, managed service, etc) under a total cost of ownership model. Again, the FCC should help schools improve not dictate the process or penalize results without clear evidence of fraudulent actions or gross negligence.

245. Should we exempt certain services, such as IRUs for dark fiber, from any limits on multi-year contracts? What are the typical terms for enterprise connectivity contracts in commercial markets? Could applicants eliminate the need for long-term contracts associated with new fiber builds by seeking a non-binding renewal option, at a predetermined rate, in contracts? Do such terms exist in contracts for enterprise connectivity for purchasers other than schools and libraries? Do similar issues

generally exist for connections to schools and libraries using technologies other than fiber, such as fixed wireless?

ENA Comments:

We strongly recommend that the FCC avoid setting any contract term limits – let local law perform that role. Non-binding renewal clauses may or may not result in higher pricing from vendors. Vendors would certainly be justified to quote higher rates based on that.

Multi-year contract rates in a competitive environment are designed so that the award winner is most cost-effective over the period. The FCC should not create a program that encourages breaking contracts or shopping for vendors during a contract or encourages vendors to try to persuade customers to leave existing contracts. Rates can typically drop dramatically at renewal due to the amortized build. Use the proposed standard methods of testing to review cost per unit and most of this will work itself out without requiring special measures and rules.

246. Are there other approaches to multi-year contracts we should consider? Should we have a cap on the number of multi-year contracts entered into by applicants in a given funding year or the amount of future funding covered by multi-year commitments? If so, how should we select which applicants seeking multi-year funding commitments receive them?

ENA Comments:

Putting a cap of number of multi-year contracts does not seem to have any purpose - if all other things are equal, it should not matter to FCC whether it is a multi-year contract or not - just that the cost is within the guidelines or can be explained due to local conditions. The multi-year deal should be pre-reviewed not pre-committed. Commitment, if funding is available, should be immediate in the next year, but not guaranteed. Adding the new methods of statistical sampling and cost testing for 471 approvals should make the value of multi-year approval minimal.

247. *Additional filing windows.* We seek comment on other ways to streamline the administration of the E-rate program and commit available funds as quickly and efficiently as possible. For instance, assuming priority one funding requests do not exceed the E-rate funding cap, should the Commission create separate filing windows – one for priority one and one for priority two commitments? Under this process, the priority one application filing window could run from January to mid-March and the priority two application filing window could run from mid-April to the beginning of June. After the priority one application filing window closes, the Commission could announce what funds are available after the priority one funding process before applicants file for priority two funding. Under this approach, applicants would not have to expend resources unnecessarily to file for priority two services if there is no funding available. Because USAC does not start reviewing priority two funding requests until much later in the funding year, the later application filing window should not slow down the funding commitment process. If, in reforming the E-rate program, we create more than two funding priorities, should we have a separate application filing window for each set of priorities? We seek comment on the operational challenges to having multiple application filing windows, and whether it would, on balance, benefit applicants and help achieve the goal of maximizing administrative efficiencies.

ENA Comments:

We are against a proposal for separate E-Rate windows. This added complexity does not seem to add value - just cost. E-Rate's priority system has created a longer delay for P2 than P1 that is not based on the timing

of need for approval. P2 actually needs approval earlier as it is for new projects that will be delayed whereas P1 is partially ongoing service and unlikely to be turned off due to funding delay. P2 does not need to be delayed to a later filing window. In fact, it is likely that many broadband improvements are dependent on P2 projects. The new approval testing process mentioned above could help alleviate the need for this suggestion.

D. Simplifying the Eligible Services List

248. We propose to simplify the ESL and the FCC Form 471 application process by adopting a definition of eligible services that provides funding for eligible services regardless of regulatory classification. Specifically, we propose to amend section 54.502 and the ESL to remove the regulatory classifications of telecommunications services and Internet access to allow applicants to seek eligible services from any entity.³¹⁰ We seek comment on these proposed rule and ESL changes as explained below.

249. The ESL, which is approved by the Bureau and published by USAC each year, provides guidance to applicants on the eligibility of products and services under the E-rate program.³¹¹ Last year, the Bureau reorganized the priority one section of the ESL to consolidate the list of telecommunications services, telecommunications, and Internet access into a single priority one category.³¹² The Bureau recognized that, “when applying for discounts, E-rate applicants are focused on the services they need for their schools and libraries, and may be unfamiliar with the regulatory framework for telecommunications services and Internet access established by Commission rulemakings.”³¹³ Also, the Bureau noted that many of the services purchased by schools and libraries using E-rate funding can fall into more than one of the regulatory classifications. As an example, one of the commenters in that proceeding asserted that many applicants erroneously think that they do not need to request Internet access when they are requesting cellular service with data packages and e-mail access.³¹⁴ The Bureau also determined that applicants would no longer be expected to classify their service requests into telecommunications service or Internet services categories when soliciting bids for those services on the FCC Form 470,³¹⁵ but that applicants must continue to select the correct category of service on the FCC Form 471 application because this serves statutory and regulatory purposes.³¹⁶

250. In the *Healthcare Connect Fund Order*, the Commission determined that it should support broadband Internet access services and also high-capacity transmission services offered on a common carrier and a non-common carrier basis to allow health care providers to choose from a wide-range of connectivity solutions using any technology from any provider.³¹⁷ Building off this decision, we seek comment on eliminating the regulatory categories with respect to E-rate supported services. Instead, we propose only that an applicant indicate on the FCC Form 470 the requested service priority level as well as provide enough detail for service providers to identify the requested services and formulate bids on the FCC Form 470.³¹⁸ The FCC Form 471 application would also require the service priority level (*e.g.*, priority one or priority two) and the Item 21 attachment would continue to be used by applicants to describe the services for which they seek discounts for each funding request. We seek comment on these changes to the E-rate forms.

ENA Comments:

We concur with the plan to form a single Priority 1 category treated consistently across all operations of the program.

251. After the ESL was revised for funding year 2013, the Bureau continued to require applicants to select the correct category of service on the FCC Form 471 application.³¹⁹ One of the

reasons for retaining this requirement is because USAC uses the service category selections to determine which applicants have sought Internet access and/or internal connections and this need to comply with CIPA.³²⁰ We seek comment on an alternative way for USAC to determine which applicants are required to be CIPA-compliant. For example, should we add a checkbox to the FCC Form 471 with a certification that the applicant is seeking discounts for Internet access and/or internal connections and is subject to CIPA requirements? If so, should we also add the actual CIPA certification to this checkbox allowing the applicant to certify its compliance with CIPA? This would allow us to remove the CIPA certification from the FCC Forms 479 and 486 so that applicants would not have to certify to CIPA on multiple forms. In its June 2013 White Paper, SECA suggests that applicants be given the option of providing the information currently required on the FCC Form 486 on the Form 471.³²¹ Although, SECA also suggests that applicants who prefer to continue filing the FCC Form 486, be given that option as well and a check box to designate this preference can be included on the FCC Form 471.³²² We seek comment on both of these possible approaches. Would either approach streamline the application, commitment and disbursement process for applicants? Would moving the CIPA certification work for all applicants including consortia?

ENA Comments:

We recommend moving the CIPA Certification to the 471 and eliminating Form 486. We recommend elimination of the form 479 as a requirement for CIPA certification for consortia. For consortia, CIPA certification can rely on a member filed 471 or on a letter of agency from a member that does not file its own 471. We recommend every entity to file a 471 no matter where they get their E-Rate funding from to make annual certifications including CIPA. Consortia should not be penalized if a certification only 471 is not filed by a consortium member. If missing, the consortium should simply have to get the wayward consortium member to submit the missing certification. Certification delay should not result in a penalty.

E. Funding Recovery Considerations

252. In 2000, the Commission adopted the *Commitment Adjustment Implementation Order*, which consistent with the Debt Collection Improvement Act (DCIA) set up a framework for recovering funds committed or disbursed in violation of the Act and our rules.³²³ USAC implemented a process for recovering funds disbursed in violation of statutory and rule violations and, in 2004, as part of the *Schools and Libraries Fifth Report and Order*, the Commission largely affirmed and further refined USAC's approach when determining what amounts should be recovered by USAC and the Commission when funds have been disbursed in violation of the Commission's E-rate program rules.³²⁴ The Commission concluded that there are circumstances that warrant full recovery of disbursed funds. For instance, the Commission found that full recovery is appropriate when the applicant failed to comply with the Commission's competitive bidding requirements.³²⁵ The Commission also found that a lack of necessary resources to use the supported services warrants full recovery of funds disbursed for all relevant funding requests.³²⁶ The Commission recognized, however, that recovery may not be appropriate for violation of some procedural rules implemented to enhance operation of the E-rate program.³²⁷ At the same time, the Commission must comply with federal obligations to recover funding that has been improperly disbursed.³²⁸

253. We recognize the importance of preventing and ferreting out waste, fraud and abuse in the E-rate program and believe that strong rules requiring applicants to reimburse USAC if they are found to have violated a statutory obligation are a powerful deterrent to waste, fraud and abuse. At the same time, as our rules have expanded, the risk to applicants of having USAC or the Commission seek full reimbursement of previously disbursed funds based on a rule or program violation has also grown,

and sometimes full reimbursement is not commensurate with the violation incurred. We therefore seek comment on whether there are certain program violations that warrant reduced recovery or some other punitive measure short of recovery. For example, would reduced recovery be warranted where an applicant delayed installation of equipment due to human resource limitations or where an applicant did not conduct a broadband assessment at the beginning of the full funding year? Are the Commission's findings that competitive bidding or necessary resources violations require full recovery still appropriate or should we reconsider those findings? Are there appropriate punitive measures we could implement that more closely tie to the improper behavior? We ask that commenters provide specific scenarios under which they think reduced penalties would be warranted, the rationale supporting reduced recovery under such scenarios, and commenters' suggestions for how the amount of recovery should be recovered. We specifically seek comments identifying a bright line approach to determining recovery amounts for rule violations, creating a system of recovery that is fair, predictable, transparent and administratively efficient. Furthermore, we seek comment on how the Commission could comply with its legal requirements under such a process.

ENA Comments:

Improper usage definition should be evaluated to narrow the definition. Improper usage should define only situations where funds were disbursed for services not received or grossly over-purchased. All other situations should result in full or reduced funding with a potential for fines to the applicant and/or vendor due to procedural errors or issues.

The biggest deterrent for applicant and vendor should be reduction in funding to market rate (with burden on applicant/vendor to establish why their rate is market or show another reasonable rate basis). However, FCC should avoid penalizing a district more than state or local law. If local law allows the contract to continue, so should the FCC.

The FCC should avoid 100% funding removal when needed services were actually received. We have seen COMADs and 100% denials for not advertising in a newspaper or missing a deadline by days. We have seen the FCC have to resolve appeal after appeal due to these type issues. Granted, the bright line will be hard to determine sometimes, but most should be handled in the initial approval stage - not through lengthy appeals. In other words, the outlier is likely to be identified through 471 testing and a solution should be developed such as a reduced FCDL or a full FCDL with a fine – not a denial followed by years of appeals.

The FCC focus should be to pay for services delivered at a reasonable rate and perhaps fine for procedural issues. We have seen numerous SLD 100% denials for issues that did not result in the local rules rescinding a contract or requiring reimbursement of services paid for. We need a balanced system that supports service to schools not a system that creates fear of technical missteps.

We recently saw an appeal denied due to price as a primary factor rule where the service was delivered and the price actually selected was very reasonable. At a maximum, the price should have been refactored and reduced funding allowed. As there was no intent to defraud or otherwise harm the program, no fine should occur. We must make the program pay for what is delivered in a timely manner.

Multiple fines for applicants would indicate outlier status for all testing of forms and FCC/USAC remediation efforts.

Multiple fines for vendors could result in FCC/USAC remediation efforts and perhaps suspension and debarment.

The FCC should consider gathering a committee of applicants, vendors, etc. to jointly recommend the structure for a fine system. The fine system should include one level of appeal but not the same multiple levels of appeal available to funding decisions.

Specific examples in this paragraph:

- *Delay of install should at most result in a fine but not rescinding funding as there has been no harm to the program once the install is completed.*
- *If broadband assessments were adopted as a requirement, which we oppose, that should at worst result in a fine.*
- *If service was delivered, appropriate reduction for competitive bidding issue that did not result in the contract being terminated could only be to a lower bid or market price as discussed above. Fines for procedural violation could be assessed.*
- *Lack of necessary resources could rise to the level of denial if in fact the applicant lied and did not have any of the resources in place or plans to get them. In the event of a determination that there were arguably less resources than needed, a fine would be more appropriate.*

F. Effective Disbursement of Unused Funding

256. We seek comment on whether there are changes we could make to the program to reduce the amount of unused funds. For example, should we direct USAC to identify applicants that consistently seek and receive funding commitments that substantially exceed the amount of disbursements that USAC ultimately issues and work with those applicants to make their funding requests more accurate? Should there be consequences for applicants who repeatedly seek funding commitments that substantially exceed the amount of E-rate support they receive? If so, how would we determine what constitutes commitments that substantially exceed disbursements and what should the consequences be? Is there a risk that such consequences could encourage inefficient or wasteful spending by a school to avoid those consequences, and, if so, how do we reduce or eliminate that risk? In addition, the Commission allows applicants an additional year to implement non-recurring services if a funding commitment decision is not issued until after March 1 of the funding year.³³² We seek comment on whether the delay in the issuance of funding commitments may contribute to the amount of unused funds. If so, commenters should propose specific ways to adjust the process to eliminate or reduce this issue.

ENA Comments:

Should USAC work with applicants that consistently seek more funds than disbursed? Yes - USAC should evaluate why entities are doing that as part of their overall sampling and outlier review process. We anticipate that many of the applicants that meet these criteria would also fall into another statistical reason for review as an outlier - like higher cost than guidelines.

There should not be consequences for such applicants at this time – other than potentially reduction of funding request to actual expected usage. Defer anything else until reforms can work. There is a real need to apply for what applicants might use as the funding request is due well before the school year starts and things can change – if applicants don't apply and then ultimately need the service, they are out of luck unless they applied for a bit of extra funding. It is difficult to forecast 15 to 18 months into the future.

Forward thinking districts are asking for some more dollars that they might not spend. Enforcement on these practices without other reforms of the process seem to encourage schools to underfile and therefore delay the possibility of advancing bandwidth as needed during a school year.

The FCC is correct that penalties for not using the funds could result in inappropriate usage. Therefore, inclusion of such review should become one of many factors in determining whether or not an FRN needs more than review for minimum standards and meeting cost guidelines.

The one year extension for P2 should remain and the goal should be to never need to grant that again by making approvals never take that long.

Issuance of funding commitments late has a major impact in amount disbursed. Projects are delayed until approval is received. P2 filings can be made for the same equipment in multiple years due to delays. Key improvement thoughts have been noted throughout this document including - using statistical sampling, cost per unit guidelines and outlier testing to move from 100% review of PIA to scope basis; removal of 486 form - eliminates another delay in project start time; consider moving the 471 filing date back by 30 or 60 days to Feb or Jan to provide more time for review prior to 7/1; approve SLD procedures by Jan 1st each year to eliminate any slowdown in processing 471s when they arrive in the filing window. Allow funding commitment waves for P1 to begin before FCC formal approval and completion of demand letter; implement initial deadlines for USAC to decide or report to applicants on status (to be annually updated and moved toward 7/1 and earlier over time based on successes).

257. We also seek comment on ways to reduce the gap in time between when an applicant knows that it will not use all or some of the funds for which it has received a commitment and when USAC is able to consider those funds rollover funds that can be used the following year. Currently, E-rate participants are advised to check with USAC whether any funds remain on a funding commitment after USAC has paid the associated invoices.³³³ Applicants are then asked to submit an FCC Form 500 in order to reduce the committed amount on the FRN to the exact amount actually used.³³⁴ By reducing its commitment to reflect the actual amount used, USAC will know that these funds can be used in the following funding year. Otherwise, any unused funding as part of the funding commitment remains outstanding and is unavailable to use in a following funding year. Should there be a deadline during or immediately following the funding year or invoice period for applicants to notify USAC whether they will use the full amount of their funding commitments and if not, how much will be available for future funding commitments? Are there incentives we can offer to applicants to encourage them to comply with the deadline? For example, should we direct USAC not to process invoices related to an applicant's funding requests if, within three months after the close of the funding year, the applicant has failed to notify USAC whether it has or does not have unused funds from the preceding funding year? Should we direct USAC to de-obligate funding six months after the invoicing deadline? Should we consider some other period of time? Should USAC then send notices to the applicants and service providers indicating that those funds have been de-obligated?

ENA Comments:

We assert that the best idea in this area (after reforms to simplify the process) is to create a de-obligation deadline and post such on the DRT for every FRN. With the elimination of some other forms and deadlines, 486 and 470, we can easily add this into the mix as the standard date to reclaim unused funds. It is a surprise to most applicants that funds do not automatically go away at some point as most just assume that occurs. We do not support any mandatory Form 500 filing or any penalty for not reducing filing amounts.

USAC, as part of the commitment process using the outlier method, should have already identified high-dollar filers and consistent overfilers and can work on that smaller group to encourage earlier fund availability. Please note that applicants do not know with certainty the exact amount of funding they will use until the year is over. Certain things are usage-based and certain purchase levels may increase

over the year based on need (for example Internet Access).

We recommend caution in implementing any type of “use it or lose it” penalty as it creates an incentive to buy before needed to avoid losing approved funds. We believe other methods are premature given the general reforms suggested already. We recommend that the FCC implement the reforms outlined throughout our response and then evaluate results of those before fine tuning the back end of the process other than stating a deadline.

We also encourage FCC and USAC to avoid sending out specific reminder letters on this and other things as they are resource intensive and should already be known by the applicants if we train them well. If desired, the DRT could add a status of de-obligated (or the Funding Status Tool) and perhaps a de-obligation deadline date.

G. Invoicing and Disbursement Process

263. We next ask whether there are additional improvements that could be made to the invoicing process or certifications that are required on the invoicing forms, FCC Form 472 and FCC Form 474. Currently, service providers must make a certification each time it files an FCC Form 472, resulting in some large service providers having to submit thousands of certifications each year. We seek comment on whether the FCC Form 473, the Service Provider Annual Certification Form, should incorporate Block 4 of the FCC Form 472 BEAR form to include the current service provider acknowledgement certifications in Block 4 of the current FCC Form 472, or if there are other approaches that would improve the administrative process while still adequately protecting against waste, fraud, and abuse.³⁴³

Are there other certifications or components of the invoicing forms that should be revised in order to improve administrative efficiency or protect against waste, fraud, and abuse? In its 2010 report, the GAO noted that USAC did not compare actual bills to the invoices before disbursing funding.³⁴⁴ Should USAC require additional documentation to be filed with the invoices in some instances? Should we require that applicants approve a service provider invoice prior to reimbursement?

ENA Comments:

We believe that a major efficiency could be achieved by removing the requirement for vendors to sign off on BEAR 472. This sign off could be replaced with a sampling of BEAR forms to invoices provided by customer and if needed a vendor certification form (similar to the service cert form used for SPI invoicing). The massive requirement for both applicant and service provider to sign off on the BEAR is unique versus any billing system we can think of. Given that USAC can review for unusual nature of any BEAR, there is more than enough review control in place to eliminate need for most vendor Bear involvement - a massive time saver with limited added risk to the program.

Similar to the BEAR comments, applicants should not be required to certify each vendor invoice. The current system of checking a sample and outliers identified by SLD seems completely adequate. The FCC could add a certification that applicants will review and comment back to SLD if needed on the quarterly disbursement report (or if our recommendation is accepted, the DRT).

FCC could also continue to train applicants on how to watch what their vendors are paid - it is reported as paid on the DRT - so it is always available. Applicants have no desire to allow vendors to overbill the program and can be counted on to participate in the process with the right training. Knowledge of the quarterly disbursement report and its role we believe is low.

In addition to these comments, we believe the 486 should be eliminated and any certifications re CIPA moved to the 471. The certifications re “service has started” can be eliminated or changed to a certification of reviewing DRT and/or Quarterly Disbursement Report. The 486 creates significant invoice error each year as well as deadline errors for the applicant. Those issues can be eliminated without significant reduction in controls regarding invoicing/disbursement as testing will be performed by USAC on all invoices for minimum standards and extended testing on a statistical sample and applicants will be certifying that they are watching disbursements for any vendor abnormalities.

We also recommend elimination of separate disbursements report and instead require applicants to review the DRT which also shows all disbursements by FRN.

264. We also seek comment on whether we should codify the invoice deadlines and deadlines for requests for an extension of the invoice deadline. Although the deadline for filing the FCC Form 472 and the FCC Form 474 has been the same, the actual day of the deadline has varied.³⁴⁵ Specifically, since the 2003-2004 funding year, the relevant invoice forms must be postmarked or received by USAC no later than 120 days after the date of the FCC Form 486 NL or 120 days after the last day to receive service, whichever is later.³⁴⁶ A grant of a request for an extension of the filing deadline provides an applicant with an additional 120 days to submit the relevant invoice forms. In the *Schools and Libraries Third Report and Order*, the Commission sought comment as to whether the Commission should codify rules establishing deadlines for service providers to file invoices with USAC and whether USAC’s existing policy to deny support for untimely filed invoices, except in limited circumstances, should be codified.

ENA Comments:

With major reforms in process, we see no benefit to immediate codification of these deadlines and would recommend deferral of this item until impact of direct reforms can be measured.

265. We now seek to refresh the record and seek comment on whether to revise our rules to automatically grant, upon request by the applicant, a one-time 120-day extension of the filing deadline for both recurring and non-recurring services to allow applicants the additional time to submit the invoice form. Applicants who receive this one-time 120-day extension would be required to show good cause for additional extensions to limit the amount of time taken for application processing. Should we also direct USAC to inform applicants promptly in writing if an invoice form is not received by the initial 120-day deadline? Applicants would then have 15 calendar days from the date of receipt of this written notice to file the relevant invoice form and necessary documentation or request a one-time 120-day extension of the invoice deadline. We believe these actions appropriately place responsibility to submit the invoice forms with E-rate participants while ensuring the goals of section 254 are realized.³⁴⁸ Additionally, adopting rules to establish deadlines for the submission of invoices and requests for an extension of the invoice deadline should help to decrease the processing time for invoices and reduce the number of outstanding unpaid invoices. The 15-day period should be sufficient time to submit any invoice forms that were untimely filed due to technical difficulties or clerical errors. Therefore, we believe this additional opportunity to file the relevant invoice form will improve the efficiency and effectiveness of the Fund. We thus seek comment on this proposal. We note that any rules we adopt on invoicing deadlines should conform to proposals aimed at reducing unused funds. For instance, we also seeking comment in this NPRM on whether USAC should be directed to de-obligate funding six months, or some other period of time, after the invoicing deadline.

ENA Comments:

The reform of these deadlines is to solve a side effect caused by some of the complexities of billing today. We recommend any such changes be deferred until impact of other billing and simplification reforms get a chance to impact the process. We support the development of a de-obligation date for services. We do not believe USAC should have to provide notice of no invoice or de-obligation. However, the DRT could be updated to include a funding de-obligation date - so the applicant could always see that information.

H. Streamlining E-rate Appeal Process

268. One result of the many opportunities to seek further review of USAC and Bureau decisions is a growing number of possible appeals. For every USAC decision, the Commission staff could be required to address the matter on three different occasions. In some cases, this delay benefits the applicants who take the multiple opportunities afforded them by our rules to avoid a negative decision. At the same time, there are sizable costs to the E-rate community when applicants and service providers must sometimes wait long periods of time for their appeals to be fully resolved. During the last several years, the Commission has attempted to streamline the process by issuing more E-rate orders addressing multiple appeals, and by streamlining aspects of the written order. Where appropriate, for example, the order provides a more concise explanation of the facts. In other orders, the Commission staff truncates the written legal analysis where the determination is clearly consistent with the Commission's precedent.

269. We seek comment on other changes Commission staff can implement to improve the appeals review process. Should Commission staff explore other ways to streamline the orders disposing of the appeals? When the Bureau grants an appeal on delegated authority, should it simply specify that the appeal is granted and not provide any analysis, or does the analysis serve the important function of providing guidance to other E-rate stakeholders? Would the request for review filed by the party provide enough guidance to interested parties? We encourage commenters to suggest creative methods to improve the efficiency of the process while providing parties and other interested stakeholders with meaningful guidance about the decision. Finally, should we consider more comprehensive changes to the appeal process pertaining to E-rate decisions? Should we reduce the number of opportunities E-rate applicants have to contest adverse findings? If so, how could that be done consistent with relevant statutory requirements,³⁵⁴ and what rule changes would be needed? Could we amend or clarify the E-rate rules to reduce the number and type of USAC decisions that can be appealed? Are there other changes we can make to improve the efficiency of the appeals process?

ENA Comments:

This section is difficult to comment on without some understanding of the volume of appeals and current time to process at all levels by type of appeal. However, in general, we are not in favor of any changes from the current appeal structure. Reform changes to simplify other aspects of the program should create far fewer appeals. In addition adopting policies that try to help applicants get funding for each application - even if reduced or with penalties - could reduce need for any appeal as the amount would more likely be agreed upon up front. Therefore, we recommend that reforms are enacted to reduce appeals and then see if further adjustment is needed. We also support more FCC and USAC staffing to clear up any backlog.

The FCC should get the appeal backlog and the pending decision backlog cleared up so that funds really available can be known and reused. There should be a deadline for when an E-Rate year must be closed out. For example, it appears we still have pending funds from 1998 - how is that possible and why can't it be closed?

VI. OTHER OUTSTANDING ISSUES

A. The Children's Internet Protection Act

271. Stakeholders have sought clarification on the applicability of CIPA to devices not owned by E-rate recipients but using E-rate supported networks and to off-premises use of devices owned by schools and libraries.³⁵⁵ We seek input from interested parties about the measures schools and libraries are taking and need to take to comply with CIPA when they allow third-party devices to connect to their E-rate supported networks.³⁵⁶ Also in response to stakeholder concerns, we seek comment on what steps schools and libraries are taking and must take to ensure that they are not violating CIPA when they provide employees, students and library patrons with portable, Internet-enabled devices that can be used off-premises.³⁵⁷

272. *Background.* CIPA prohibits schools and libraries from receiving E-rate funding for Internet access services, or internal connections, unless they comply with, and certify their compliance with, specific Internet safety requirements, including the operation of a technology protection measure.³⁵⁸ Schools, but not libraries, must also provide education about appropriate online behavior including cyber-bullying.³⁵⁹ When CIPA was enacted, most school and library computers that provided Internet access were found at large, stationary terminals. Few, if any, students or staff brought computers to school, and, likewise, library patrons did not bring their own Internet-enabled devices into libraries. Moreover, even if people had brought their own computers into schools and libraries, almost no schools or libraries had Wi-Fi hotspots or other ways to allow outside computers to access their Internet connection. Now, it is commonplace for students and employees of, and visitors to, schools and libraries to carry Internet-enabled devices onto the premises and for schools and libraries to allow third-party devices access to their networks.³⁶⁰ Additionally, more and more school- and library-provided devices are brought off-campus to connect with other networks.

273. *Covered devices.* We seek comment on what devices are covered by CIPA. Congress mandates that CIPA apply to schools and libraries "having computers with Internet access,"³⁶¹ and also requires each such school or library to certify that it is enforcing a policy of Internet safety that includes the operation of a technology protection measure "with respect to any of its computers with Internet access."³⁶² We seek comment on whether the language "computers with Internet access," as used in the context of CIPA, includes all devices used to access the Internet, including all portable devices such as laptops and netbooks with wired Internet access, with Wi-Fi capability, or with wireless data or air cards; cellular phones or "smartphones" capable of accessing the Internet; and Internet-enabled e-readers and tablets. As more and more devices, from routers to refrigerators, are equipped with computing capability, we seek comment on limiting principles we should apply to our treatment of what constitutes a computer with Internet access for CIPA purposes, and how those limiting principles relate to the statutory language and goals of CIPA. For example, should we consider as a limiting principle the language in CIPA that requires the operation of a technology protection measure that provides protection against access to "visual depictions" that are obscene, child pornography, or harmful to minors? Specifically, does the use of "visual depictions" in CIPA mandate that in order to fall within CIPA, the computers with Internet access in question must at least provide a screen, monitor, or other way to view the prohibited material? We also invite commenters to recommend specific changes to our rules that would clarify this issue. For example, should we include a definition of "computers with Internet access" in our CIPA-related rules, and what should that definition be?

274. We also seek comment on whether the phrases "having computers with Internet access" and "with respect to any of its computers with Internet access" and other similar language in

the statute means that schools and libraries are required to comply with CIPA only with regard to those computers that they own or control. Does this interpretation fulfill the intended purpose of CIPA?³⁶³ We also seek comment on whether we should amend our CIPA-related rules to reflect this reading of the statute, and if so how should we amend them. In the alternative, we seek comment on whether CIPA should be interpreted more broadly to be focused on protecting children from harmful online content on any device, and therefore require CIPA compliance with respect to any computer that is accessing the Internet using E-rate supported Internet access or internal connections, regardless of the ownership or control of the device used to access such content.³⁶⁴

275. *Off-Campus Use.* We seek comment on whether CIPA requirements extend to school or library computers taken off-campus and used with outside networks that are not supported by E-rate. If we find that CIPA requirements do not apply to computers with Internet access when used with networks that are not supported with E-rate funds, how should we address instances where school or library computers are used to access the Internet using a service that is supported for on-campus use, but not for off-campus use? For example, if a student uses a tablet with an Internet access data plan, the school could seek E-rate support for the portion of the cost of the data plan used on-campus, but not for the portion used off-campus. Should the CIPA requirements only apply when the computer is used on campus, because the school is not seeking E-rate support for the off-campus portion of the cost of the data plan? We also seek comment on whether our existing CIPA-related rules need to be amended to cover these off-campus use situations. We request that commenters be as specific as possible when recommending amendments to our rules.

ENA Comments:

We assert that E-Rate only needs to be concerned with CIPA as it relates to E-Rate funded service. E-Rate cannot be the CIPA cop for issues not associated with E-Rate funding. Local school systems deal with the issues of BYOD and home usage on a daily basis and have pressure from multiple fronts - media, parents, etc. - to get it right in terms of not allowing students to access inappropriate materials while at school - no matter what device or bandwidth the student is using - and while at home with a school device.

There is no need for FCC and E-Rate to pile on with more burdens. If FCC wants to share some best practices to make this easier, that may be helpful, but otherwise don't spend the resources and adopt a local control philosophy for non E-Rate funded issues.

E-Rate should require filtering on BYOD units that are using e-rate supported bandwidth. E-Rate must rely on locals to handle any issues with BYOD units using their "own" (non E-Rate) paid for bandwidth to access inappropriate content.

E-Rate cannot be 24/7 universal CIPA police. Off campus usage should be handled by the school system. Note that if a device somehow accesses the same network through the same interface, i.e. a data card solution, on and off campus, it seems that the same filtering could be available at all times. If it is set to work during school hours, it is up to the school district whether it continues to work after school hours. From a common sense perspective, no principal or superintendent would likely release devices unprotected and risk having to deal with the high probability of inappropriate usage. However, it is possible that many transfer this burden to the parents through a parental certification of appropriate use by the student. Either way, E-Rate should stay out of the off campus filtering discussion as a rule maker and only enter as a provider of best practice info if it becomes available.

2. Documentation of Competitive Bidding

298. As discussed above, E-rate applicants are currently required to retain documentation that demonstrates compliance with the statutory or regulatory requirements for the E-rate program as well as all asset and inventory records of equipment purchased as components of supported internal connections services sufficient to verify the actual location of such equipment for a period of five years after purchase.⁴⁰⁴ In the *Healthcare Connect Fund Order* the Commission required applicants to the HealthCare Connect Fund to submit to USAC competitive bidding documents, including a copy of each bid received, the bid evaluation criteria, bid sheets, a list of people who evaluated bids, memos, board minutes, or similar documents, and any correspondence with vendors during the bidding, evaluation, and award phase of the process. Having such documents from E-rate recipients would allow USAC to evaluate more fully the competitive bidding process conducted by E-rate applicants and ensure that documentation of the competitive bidding process was retained in the event of an audit. At the same time, providing such documents would impose additional burdens on E-rate applicants and could increase application review time and administrative costs. We therefore seek comment on whether we should similarly require E-rate applicants to submit competitive bidding documents with their FCC Forms 471. Are there specific documents, such as the bid selection sheet, that would allow USAC to review an applicant's competitive bidding process while minimizing the burden on applicants?

ENA Comments:

We strongly recommend that this documentation requirement is not adopted. Absent evidence of necessity, this would be the most dramatic blow to E-Rate administration possible. Any hope of improving the approval timing of the program would be eliminated. Requiring 46,000 sets of competitive bid information to be reviewed and questioned by the SLD - with no initial reason to request that information – is troubling and wasteful.

There is not currently a national purchasing law that generates a similar form or document for all districts - so a short form for this is not necessarily available. We believe that any request to review competitive documents should be on an outlier and sampling basis only as most likely 45,000 of 46,000 are simple and without issue whereas 1,000 might be problematic - it would be a shame to have 45,000 go through PIA and create no value. Back to basic recommendation concept - simplify, statistical sampling and cost outlier testing - and approval speed and compliance should improve.

3. E-rate FCC Form Certification Requirements

300. Currently, most E-rate forms submitted to USAC require an “authorized person” to attest to the certifications contained on those forms on behalf of the entity submitting the form.⁴⁰⁵ While a signatory may be “authorized” to sign an E-rate form pursuant to a general delegation by the applicant or service provider, occasionally signatories on the E-rate forms do not have sufficient knowledge about the actual operation of the E-rate program or a sufficient understanding of the Commission's E-rate program rules to provide a meaningful or accurate certification. As a way to further guard against waste, fraud and abuse, we therefore propose to amend our rules to require that an officer of the service provider sign certain forms submitted to USAC in support of an application for eligible services and any requests for payment. We also propose to codify the current certifications contained on our E-rate forms. We further propose to require service providers to certify their compliance with the lowest corresponding price rule and with state and local procurement laws.

ENA Comments:

Absent specific evidence of the necessity of this additional burden, we believe this should not be added. It may make sense to have one form per year from applicants and vendors to have an officer or equivalent

signature (specifically 471s and 473s respectively), but not all forms.

a. E-rate FCC Form Signatories

301 First, we seek comment on whether the current signatories on the following E-rate forms and any other E-rate forms are sufficiently knowledgeable about the E-rate program to accurately certify to program compliance. The relevant E-rate forms include:

FCC Form 470 (Description of Services Requested and Certification Form). The FCC Form 470 is used by an applicant to open a competitive bidding process for desired eligible services.⁴⁰⁶ It requires an “authorized person” on behalf of the school or library to certify certain information to ensure, among other things, that the applicant will conduct a competitive bidding process in accordance with Commission rules, the applicant has not received anything of value from the service provider other than the requested services, and that only eligible entities receive support under the E-rate program.⁴⁰⁷

FCC Form 471 (Services Ordered and Certification Form). The FCC Form 471 is used by an applicant to request funding from USAC for the services selected by the applicant during its competitive bidding process, and to provide USAC with information about the requested services and the discount(s) for which an applicant is eligible to receive on eligible services under the E-rate program.⁴⁰⁸ As with the FCC Form 470, the FCC Form 471 requires an “authorized person” to certify to certain information to ensure, among other things, that only eligible entities will receive support under the E-rate program.⁴⁰⁹

FCC Form 472 (Billed Entity Applicant Reimbursement (BEAR) Form). The FCC Form 472 is used by an applicant to seek reimbursement from USAC for discounts on services paid in full.⁴¹⁰

This form requires certifications by an “authorized person” on behalf of both the applicant and service provider to ensure that the applicant has paid for the services, that the service provider has provided discounted services within the current funding year for which it submits an invoice to USAC, and that invoices submitted from service providers for the costs of discounted eligible services do not exceed the amount that has been approved.⁴¹¹

FCC Form 473 (Service Provider Annual Certification Form). The FCC Form 473 is used to establish that the participating service provider is eligible to participate in the E-rate program and to confirm that the invoices submitted by the service provider are in compliance with the E-rate rules.⁴¹² This form requires certain annual certifications by an “authorized person” on behalf of the service provider to ensure that the service provider is in compliance with the Commission’s rules.⁴¹³

FCC Form 474 (Service Provider Invoice (SPI) Form). The FCC Form 474 is used by service providers to seek payment from USAC for the discounted costs of services it provided to applicants for eligible services.⁴¹⁴ The FCC Form 474 is also used to ensure that each service provider has provided discounted services within the current funding year for which it submits an invoice to USAC, and that invoices submitted from service providers for the costs of discounted eligible services do not exceed the amount that has been approved.⁴¹⁵ While this form does not currently require attestation to certifications, we have recently sought renewal of this form and have proposed to include certifications by an “authorized person” on behalf of a service provider.⁴¹⁶

FCC Form 479 (Certification by Administrative Authority to Billed Entity of Compliance with the Children's Internet Protection Act). The FCC Form 479 is used by the Administrative Authority for one or more schools or libraries, for which universal service discounts have been requested or approved for eligible services, to certify their compliance with CIPA.⁴¹⁷ This form requires an "authorized person" on behalf of the Administrative Authority to certify that an Internet safety policy is being enforced.⁴¹⁸

FCC Form 486 (Receipt of Service Confirmation Form). The purpose of the FCC Form 486 is to authorize the payment of invoices from service providers, indicate approval of technology plans, and indicate compliance with CIPA.⁴¹⁹ This form requires an "authorized person" on behalf of the applicant to certify that, for example, the discounted services indicated on the form are covered by the technology plan that has been approved by the state or other authorized body and that the services listed on FCC Form 486 have been, are planned to be, or are being provided to all or some of the eligible entities identified on the FCC Form 471.⁴²⁰

FCC Form 500 (Adjustment of Funding Commitment and Modification to Receipt of Service Confirmation Form). The FCC Form 500 is used by the applicant to make adjustments to previously filed forms, such as changing the contract expiration date filed with the FCC Form

471, changing the funding year service start date filed with the FCC Form 486, or cancelling or reducing the amount of funding commitments.⁴²¹ This form requires an "authorized person" on behalf of the applicant to certify as to the veracity of the information within the form, the applicability of the discount level, and that any records relied on to complete the form will be retained for five years.⁴²²

302. We propose to require that an officer of the service provider make the required certifications on the FCC Form 472 (BEAR Form), FCC Form 473 (Service Provider Annual Certification Form) and the FCC Form 474 (SPI Form), the key documents provided by service providers to USAC attesting to the service provider's compliance with the E-rate rules and seeking payment for supported services provided. Requiring an officer to certify compliance will help ensure that the certification reflects the service provider's commitment to understand and comply with the E-rate program rules and requirements.

303. Specifically, in proposing to require officer certification on the FCC Form 472, we seek comment on amending section 54.504(f) to read:

(f) Filing of FCC Form 472. All service providers must submit a Service Provider Acknowledgement as part of the Applicant's FCC Form 472 seeking reimbursement from the Administrator for eligible services. The FCC Form 472 shall be signed by an officer of the service provider and shall include the officer's certifications under oath that:

(1) This service provider will remit the discount amount authorized by the fund administrator to the Billed Entity Applicant who prepared and submitted the Billed Entity Applicant Reimbursement Form as soon as possible after the fund administrator's notification to the service provider of the amount of the approved discounts on this Billed Entity Applicant Reimbursement Form, but in no event later than 20 business days after receipt of the reimbursement payment from the fund administrator, subject to the restriction set forth in subsection (2) below.

(2) This service provider will remit payment of the approved discount amount to the Billed

Entity Applicant prior to tendering or making use of the payment issued by the Universal Service Administrative Company to the service provider of the approved discounts for the Billed Entity Applicant Reimbursement Form.

(3) This service provider is in compliance with the rules and orders governing the schools and libraries universal service support program and that failure to be in compliance and remain in compliance with those rules and orders may result in the denial of discount funding and/or cancellation of funding commitment.

(4) Failure to comply with the rules and orders governing the schools and libraries universal service support program could result in civil or criminal prosecution by law enforcement authorities.

What are the benefits and burdens of requiring an officer signature on the FCC Form 472?

ENA Comments:

Absent specific evidence of the necessity of this additional burden, we believe that not only should the rule not require a vendor officer to sign the BEAR, but that the rule requiring a vendor signature should be completely removed from the 472. We are aware of no similar programs where the vendor has to countersign that the applicant can properly fill out a reimbursement form. For compliance purposes, we recommend a hearty sampling program for BEARS whereby SLD can ask for a vendor cert if issues arise. Since BEAR reviews already seem to include asking the applicant to provide invoices to support the filing, it seems an easy compliance step to just do that on a statistical sampling and outlier method and eliminate 100% vendor involvement. This change would radically improve the speed of invoicing since the applicant will not be waiting for the vendor to certify.

305. Further, in proposing to require officer certification on the FCC Form 474, we seek comment on adding a new provision to our rules at section 54.504(h) that would read:

(h) Filing of FCC Form 474. All service providers seeking reimbursement from the Administrator for eligible services shall submit a completed FCC Form 474 to the Administrator. The FCC Form 474 shall be signed by an officer of the service provider and shall include the officer's certifications under oath that:

(1) This service provider is in compliance with the rules and orders governing the schools and libraries universal service support program and that failure to be in compliance and remain in compliance with those rules and orders may result in the denial of discount funding and/or cancellation of funding commitment.

(2) Failure to comply with the rules and orders governing the schools and libraries universal service support program could result in civil or criminal prosecution by law enforcement authorities.

What are benefits and burdens of requiring officer certification on the FCC Form 474?

ENA Comments:

Vendor Officer signature on Form 474 - barring evidence that lack of this type of signature has created

negative impact on the program, the burden of having an officer sign these forms seems like waste. There are no other billing situations that we are aware of that require an officer to sign them. The SLD has the ability to review, interrogate and examine before payment and the ultimate penalty in billing seems to be rejection of invoice. If there are other penalties needed, it is likely that the certifications provided in the 473 would suffice to go after the vendor. In addition, this change penalizes vendors who use the SPI method vs. the BEAR method - and the SPI method should be preferred by the FCC because it removes financial and administrative burdens from the schools that are in place with the BEAR program and makes the vendor do that work/bear that cost.

306. Similarly, we propose and seek comment on whether we should also require all E-rate forms submitted by E-rate applicants be signed by someone with authority equivalent to that of a corporate officer. For example, we propose amending section 54.503(a)(2) of our rules to read:

(2) The FCC Form 470 shall be signed by the person authorized to order eligible services for the eligible school, library, or consortium including such entities, and with authority equivalent to that of a corporate officer, and shall include that person's certification under oath that:

We also propose amending section 54.504(a)(1) of our rules to read:

(1) The FCC Form 471 shall be signed by person authorized to order eligible services for the eligible school, library, or consortium, and with authority equivalent to that of a corporate officer, and shall include that person's certifications under oath that:

Commenters should provide comments on both the benefits and burdens of requiring an equivalent signature for applicants on the FCC Forms 470, 471, 472, 479, 486, and 500, and any other E-rate forms attested to by the applicant.

307. In the alternative, we seek comment on whether we should require that the certifications on the FCC Forms submitted by applicants, service providers or both be made by an individual with substantial knowledge of E-rate program requirements who is also responsible for ensuring program compliance by the service provider or the applicant. Commenters should provide comments on the benefits and burdens of requiring such a knowledgeable individual to sign the FCC Forms 470, 471, 472, 473, and 474, and any other E-rate forms.

ENA Comments:

Paragraphs 306 and 307 seem to be a legal concept - has there been significant impact to the program due to faulty signatures that would be resolved with this requirement? If not, it seems another overly burdensome addition after fifteen years of processing. As an aside, a compromise may be to require the 473 and one equivalent applicant form be signed by the requested individual each year.

b. Existing Certifications

308. Our rules currently require certain certifications be made as part of the FCC Forms 470, 471, 472, 479, 486, and 500, but we recognize that many of the certifications on the current E-rate forms are not codified in the Commission's rules.⁴²⁵ For example, the FCC Form 471 requires that a person authorized by the applicant certify that no kickbacks were paid to anyone within the applicant. This certification, however, is not specified in section 54.504(a)(1) of our rules.⁴²⁶ We thus seek comment on whether we should amend our rules to include all of the certifications currently found on

the E-rate FCC Forms.⁴²⁷ If we do so, should we make the list of certifications non-exclusive and to continue to delegate authority to the Bureau to consider including additional certifications on E-rate forms as necessary and appropriate? We seek comment on that approach.

ENA Comments:

Whether or not FCC decides to codify existing certifications, the second part of paragraph 308 seems prudent - delegating authority to Bureau to add certifications as deemed appropriate and necessary.

4. Post-Commitment Compliance and Enforcement.

314. The Commission currently has tools available to ensure compliance with our rules and to impose penalties upon those parties who willfully violate our rules. The Commission's USF audit program, called the Beneficiary and Contributor Audit Program (BCAP), is one of our most important tools for identifying and deterring program rule violations, and for recovering funding that has been improperly disbursed.⁴³² We take this opportunity to reinforce our continuing commitment to ensuring that the Commission and USAC have a rigorous audit program that includes both targeted audits of high-risk applicants and vendors as well as random audits to ensure that all applicants and vendors comply with our rules. We also take this opportunity to seek comment on whether there are ways to further strengthen the BCAP audit procedures to ensure that compliance issues, particularly substantial ones, are identified.

315. Recently, in reforming the USF Lifeline program, the Commission required that every eligible telecommunications carrier (ETC) providing Lifeline services and drawing \$5 million or more in the aggregate on an annual basis from the Lifeline program hire an independent audit firm to assess the ETC's overall compliance with the program's requirements.⁴³³ Those audits must be performed once every two years, unless otherwise directed by the Commission. We seek comment on whether we should adopt a similar third-party independent audit requirement for E-rate applicants or service providers as a method of augmenting the current BCAP program. If so, what should we establish as the threshold for the audits? Should it be a set dollar amount or should it be the top percentage of recipients – for example, the top 1 percent or the top 20 funding requests – regardless of the dollar amounts? Should the threshold be based on funding requests or funding actually disbursed? How often should such an audit be required? Would the frequency of such a requirement be different if the audit identified issues or it had no findings? What would be the burden of such a requirement on applicants and service providers? We recognize that some other federal programs require funding recipients to conduct annual audits, and seek comment on whether there are audit requirements in those programs that we should adopt in the E-rate program. We also seek comment on any other ways the Commission could improve its own audit processes.

ENA Comments:

We disagree strongly that the program needs to advocate more audits and especially some kind of to be defined third party audit paid for by vendors and applicants. The FCC criticizes the hiring of consultants to assist with program compliance but at the same time suggests that applicants spend limited funds on auditors to see if they did things correctly?

The FCC wants the lowest possible service cost and lower pricing than every other customer served by a vendor and then turns around and requests vendor funded compliance audits, lowest corresponding cost

rules, stringent gift rules, etc. Increasing the cost to do business with E-Rate applicants will (1) drive up the cost; (2) limit the number and quality of participating vendors and (3) likely make some vendors decide not to participate in the program. A program that wants to attract broadband investment and increase service levels does not increase the regulation of its vendor pool. A vendor with choices to invest in a commercial project or a school project will likely select the commercial project to avoid the entanglements of the E-Rate program.

What data merits this additional burden on certain systems and vendors? Why should large vendors and applicants have special requirements just because of their size? They should be subject to the same statistical reviews as other applicants and if they pass, why should they be required to do more work, have more expense? If per unit measures are in place, outliers will be determined without discrimination and reviewed. That is the way that is consistent and fair to all school systems. If one of the top requesters is out of line with the dollars requested, they will get reviewed by SLD.

In addition to these comments, we question the availability of independent third parties with sufficient E-Rate experience to perform these audits. The E-Rate program should not require the vendors and applicants mentioned to pay to train auditors to do this work. In addition, the extra cost of evaluating all of these audits seems off point as well. We strongly recommend the previously suggested simplifications of the program first – then watch the results - and then implement some additional controls if needed.

E. Wireless Community Hotspots

319. We next inquire whether we should continue to increase the reach of E-rate supported services. In the *Schools and Libraries Sixth Report and Order*, the Commission revised its rules to allow schools to open their facilities to the general public to utilize services supported by E-rate when classes are not in session.⁴⁴⁴ The Commission recognized that providing community use on school premises was consistent with the overarching goals of universal service to promote access to telecommunications and information services.⁴⁴⁵ In order to effectuate this change, the Commission amended sections 54.503 and 54.504 to require applicants to certify that “[t]he services the applicant purchases at discounts will be used *primarily* for educational purposes,” as opposed to *solely* for education purposes.⁴⁴⁶ We now seek comment on whether we should permit schools to provide wireless hotspots to surrounding communities using E-rate supported services.

320. We first seek comment on permitting students and the general public to receive E-rate funded Internet access offsite through wireless hotspots.⁴⁴⁷ In allowing community use of schools’ E-rate supported broadband services, the Commission recognized that students’ need for broadband access does not end when their schools’ doors close for the day. Allowing after-hours, on-premises access to a school’s broadband connections has given students the opportunity to work on homework, school projects and engage in extracurricular activities that require broadband access. At the same time, it has allowed other community members broadband access for adult education, job training, digital literacy programs, and online access to governmental services and resources. However, not all community members who need broadband access can take advantage of on-premises access to school’s broadband services. For example, in response to this issue, Oakland Unified School District and Revere Public Schools both filed petitions with the Commission seeking waivers of our rules to allow them to provide wireless hotspots in communities surrounding their schools.⁴⁴⁸ We therefore seek public input on the prospect of permitting wireless hotspots for communities.

321. We also ask whether we should implement other changes to the E-rate program to accommodate the use of wireless hotspots. Currently, services used off school or library property are generally ineligible for E-rate support because they are not deemed to be used for “educational

purposes.”⁴⁴⁹ Therefore, if applicants use a service both on-premises and off-premises, they must reduce their funding request by the amount of the ineligible off-site use.⁴⁵⁰ Recognizing the potential value to students and the broader community of having access to broadband services off-premises, are there programmatic changes we should make to ensure applicants are able to deploy such wireless hotspots? Do we need to further revise the educational purposes standard if we permit off-premises access for community use?

322. To reduce the likelihood of waste, fraud, and abuse, and to guard against potential additional costs being imposed on the E-rate program, the Commission adopted several conditions for allowing community use of schools’ E-rate supported services during non-school hours. Specifically, (1) schools are not permitted to request funding for more services than are necessary for educational purposes and may not seek funding for more services or equipment than necessary to serve its current school or library population; (2) the use of E-rate funded services after hours must comply with Commission rules, including CIPA; and (3) consistent with the Act, the discounted services or network capacity may not be “sold, resold, or transferred by such user in consideration for money or any other thing of value.”⁴⁵¹

Should we impose the same conditions with respect to off-site access via wireless hotspots? We seek comment on whether there are any unique circumstances in the context of offsite use that would reasonably change these conditions. Furthermore, we seek comment on whether there are any additional conditions to guard against waste, fraud, and abuse that should be imposed on E-rate applicants that use E-rate funded services for wireless community use.

323. We also seek comment on what other conditions we should impose on allowing community access to schools’ E-rate supported services via community hot spots. Our rules allowing for community use in schools limits that use to non-school hours. Should we impose the same limitation here? Is there a justification for such a limitation in this case where wireless service will be accessible at all hours and, unlike the community use implemented in the *Schools and Libraries Sixth Report and Order*, does not require use of the applicant’s physical property? Are there reasons to preclude access to the wireless service during school hours? Would permitting such wireless access to the community during school hours be detrimental to the operations of the school? For example, could testing or other school operations reliant on broadband be negatively affected by community access during school hours?

If so, are there any measures applicants could take to reduce the impact of the community access on the applicant? Next, should we impose any geographic limitations on the scope of offsite Internet access? What restrictions, if any, should be placed on service providers in the communities that donate equipment, services or funding to help with the creation or expansion of the Internet access points to ensure no violations of the Commission’s gift rules occur?⁴⁵² We also seek comment on the adequacy of security measures that would be needed to guard against network security breaches. What other issues are raised by this idea?

ENA Comments:

ENA recommends that any E-Rate support for community wireless hot spots be directed to support additional capacity for community libraries. Why would the program push libraries to grow and then create other centers for Wi-Fi after hours? If schools and communities want to extend the after hour value of the E-Rate network at their cost by connecting to some kind of off-site hotspot, we recommend that that should be allowable and just an extension of the after-hours community use rules - however, no extra funding should be allowed for this to occur - this access presumes available bandwidth after hours -

which may or may not be true given after-hours usage for things such as admin data transmission, etc. - and it should be a local decision to decide to do this.

The FCC should not allow for any usage during school hours unless that was paid for 100% by the school or other party. In general, this seems like something to delay until other reforms are completed to avoid spending any resources on this option. If added, perhaps the Form 471 should ask whether the school allows such usage - for further FCC understanding of best practices (and not as a way to punish). We would recommend Wi-Fi for school buses be allowed if this is going to be allowed.