

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Modernizing the E-rate Program for)	WC Docket No. 13-184
Schools and Libraries)	
)	

**COMMENTS FUNDS FOR LEARNING, LLC ON
PROPOSED ELIGIBLE SERVICES LIST FOR SCHOOLS AND LIBRARIES UNIVERSAL
SERVICE PROGRAM FOR FUNDING YEAR 2021**

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SUMMARY

Representing a variety of applicants from across the country, Funds For Learning, LLC (“FFL”) appreciates the opportunity to provide input on the funding year 2021 Eligible Services List (“ESL”). FFL clients come to us with their own set of circumstances, experiences, and local goals and objectives. This provides us with a unique perspective into the E-rate program. It also allows us to see how program rules affect applicants in practice and, importantly, how those rules can be improved. We offer the following comments with the goal of making the program more efficient and beneficial to all program participants.

First, FFL urges the Wireline Competition Bureau (“WCB”) to clarify that network security and monitoring services qualify for E-rate support. Today, broadband networks cannot function without security, monitoring, and related services. We are not asking the WCB create a new class of eligible services to include network security and monitoring services and equipment. Instead, we suggest that it fits into the existing eligible services framework because it is necessary to provide broadband access to students, patrons, and their communities. The Commission has acknowledged the importance of permitting applicants to allocate their Category Two budgets how they see fit. For the same reasons, we support giving schools and libraries the option and flexibility to spend their Category Two budgets on what network infrastructure they believe to be most essential to building and maintaining their networks, including security and network monitoring services.

Second, we encourage the WCB to clarify that all on-premise devices may be connected to structured cabling and data distribution equipment, thereby eliminating the associated cost allocation requirement. USAC’s enforcement of the rules concerning what equipment can and cannot be connected to Category Two infrastructure is inconsistent and arbitrary. Determinations are not made using any clear criteria. Instead, USAC appears to make determinations on a case-by-case basis, depending on the type of network device at issue, and whether it serves an “educational

purpose.” This requires applicants to perform complex cost allocations to remove the associated costs for any ineligible equipment. We believe important practical considerations require eliminating these unnecessary restrictions. At a minimum, the WCB should clarify existing rules concerning network-connected devices and establish clear eligibility criteria.

Third, we firmly support eliminating the distinctions between different Category Two services and, instead, treating the services as a single category comprising all eligible Category Two functionality. Because the sub-categories of service are confusing and routinely lead to unnecessary procedural funding denials, this has created systemic hurdles in the funding and payment process. Moreover, under existing E-rate rules, the Category Two service distinctions serve no practical purpose. Eliminating the Category Two sub-categories will also lead to greater program efficiency and reduce delay caused by unnecessary funding denials.

With these improvements and clarifications, the WCB’s eligible service rules will better serve all E-rate stakeholders by offering clarity and removing unnecessary restrictions on the use of necessary services and equipment.

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Funds For Learning, LLC (“FFL”) submits these comments in response to the Wireline Competition Bureau’s (“WCB”) public notice regarding the proposed Eligible Services List (“ESL”) for E-rate funding year 2021.¹

I. INTRODUCTION

Funds For Learning is a national E-rate compliance consulting and web services firm. For the past 23 years, FFL has dedicated itself exclusively to the needs of E-rate stakeholders. Our clients include some of the country’s smallest and largest E-rate applicants.

FFL clients come to us with their own set of circumstances and experiences. This provides us with a unique perspective into the E-rate program. It also allows us to see how program rules affect applicants and, importantly, how they can be improved. We offer the following comments with the goal of making the program more efficient and beneficial to FFL clients and all E-rate stakeholders.

¹ Wireline Competition Bureau Seeks Comment on Proposed Eligible Services List for the E-rate Program, DA 20-767 (WCB rel. July 21, 2020) (Funding Year 2021 Draft Eligible Services List).

II. NETWORK SECURITY AND MONITORING SHOULD QUALIFY FOR E-RATE SUPPORT

Schools and libraries today face extraordinary challenges. Applicants nationwide are operating with increasing pressure on their budgets. These institutions are also tasked with ensuring student access to the internet during the unprecedented coronavirus pandemic. At a time when internet access has become even more crucial, and budgets are becoming even tighter, threats to the networks providing this internet access continue to grow exponentially.

In today's increasingly connected world, locking down a network is as important as locking the doors to your house. Rather than encouraging applicants to keep their networks as secure as possible, and in turn protecting their E-rate-supported assets, the current eligibility rules do just the opposite. This dismissive approach is unwise and counterproductive. Network security and monitoring services and equipment protect against internal and external network attacks, keep communications private, control access to information on the network, and by giving users confidence, in the security of the network, encourages them to use it. Together, network security and monitoring give networks the protection they need to function optimally and, at times, even at all. Given how crucial internet access has become, it is difficult to imagine why the Commission would not want schools and libraries to keep their networks secure and reliable. Today we urge the WCB to take a closer look at cybersecurity and clarify that network security and monitoring are eligible for Category Two support.

A. Network Security Is Necessary to Bring Broadband into Schools and Libraries

The objective of the E-rate program is to ensure that our nation's students and library patrons have access to high-speed broadband. This includes reliable and consistent access to the internet. To that end, it is necessary to consider funding any type of product or service which is necessary to achieve that objective. FFL supports making network security and monitoring

available to schools and libraries through the E-rate program by whatever means necessary. We are not, however, asking the WCB to make a determination in this proceeding that these services are eligible. Rather, we believe network security and monitoring services are already eligible because they fit within the eligible services framework and because network security and monitoring have become absolutely essential in school and library networks.

The ESL provides that Category Two support is “limited to the internal connections necessary to bring broadband into, and provide it throughout, schools and libraries.”² Because network security and monitoring in today’s world *is* necessary to bring broadband into schools and libraries, we argue that these services are eligible – even under existing rules. We know that attacks on school and library networks are occurring, that they are growing in frequency, and that they account for a significant amount of network downtime each year. As a result, in today’s school and library networks, security and monitoring has become necessary to ensure that students and patrons have this broadband access. In practice, it is every bit as required for the operation of a local area network as a switch, router, or cabling. Network security is, in effect, network infrastructure. Yet because the Commission has taken a passive approach on the subject, schools and libraries are required to allocate funds from other sources to implement network security measures. We encourage the WCB to reexamine its current position on network security and clarify that these services qualify for E-rate support because they are necessary to ensuring schools and libraries can provide consistent, reliable internet access to their students and patrons.

It is important to note that this does not require reworking any portion of the current eligible services framework. We are not asking the WCB create a new class of eligible services to include network security and monitoring services and equipment. Instead, we suggest that it

² Funding Year 2021 Draft Eligible Services List at 6.

fits into the existing eligible services framework. The definition of critical network infrastructure includes security, and, after all, an infrastructure support program of any kind is incomplete when security is excluded.

B. Network Security Protects and Preserves the Significant E-Rate Investments in Broadband Networks

Network security and monitoring is not only necessary to bring broadband into, and provide it throughout, schools and libraries. It is crucial to protecting the substantial E-rate program investments in broadband connectivity and network infrastructure from malicious attacks and cybersecurity threats. The E-rate program has provided schools and libraries, and the communities they serve, with significant assets to further the program's goals and objectives. Network security and monitoring services are necessary for the preservation and reliable operation of these assets. Accordingly, we encourage the WCB to carefully consider the value of network security in protecting those important investments.

C. Applicants Should Be Given the Option to Select Services They Value Most

There is near universal support within the E-rate community to make network security and monitoring services eligible. In July 2020, Funds For Learning conducted its 10th annual nationwide survey of E-rate applicants.³ With 2,128 survey respondents – nearly 10% of all funding year 2020 applicants – the results provide an accurate representation of schools' and libraries' experience with, and their opinions on, the program. Responses were received from every type of applicant, from every state and territory, representing both rural and urban zones. When asked which services should qualify for E-rate support, 98% of applicant-respondents

³ 2020 E-rate Trends Analysis, Funds For Learning *Ex Parte* Submission, WC Docket No. 13-184, CC Docket No. 02-6 (filed July 17, 2020) available at <https://ecfsapi.fcc.gov/file/1071774292501/2020-07-17%20Applicant%20Survey%20Results%20WCB%20Ex%20Parte.pdf>

indicated that cybersecurity should be eligible for discounts.⁴ Given the overwhelming support, it is clear applicants deem these services essential. Clarifying that network security and monitoring services are eligible for Category Two discounts would permit schools and libraries to select the services they believe most important to meet their individual need.

In the *Category Two Order*, the FCC adopted a district-wide and library system-wide budget capping the funding available to applicants regardless of which services are requested.⁵ In adopting the approach, the Commission recognized the importance in giving applicants the option to allocate Category Two funding among their schools and libraries as they see fit. It acknowledged that different applicants have different technological needs, and that the approach would allow individuals schools and libraries to determine how best to account for these differences.⁶ Offering applicants this flexibility, the Commission noted, would also ensure a more effective use of E-rate funds.⁷

For the very same reasons, it makes sense to give applicants the option to spend their Category Two budgets on whatever network infrastructure they believe is most important, including network security and monitoring. It would allow schools and libraries to allocate Category Two funding to meet their individual requirements, which given the overwhelming support, would almost certainly include network security and monitoring. As the Commission has recognized, schools and libraries are in the best position to make determinations concerning their individual networks and about what is necessary to ensure network availability to students

⁴ *Id.* at 37.

⁵ *Modernizing the E-Rate Program for Schools and Libraries*, WC Docket No. 13-184, Report and Order, FCC 19-117 at para. 22 (rel. Dec. 3, 2019) (Category Two Order).

⁶ *Id.* at para. 22.

⁷ *Id.* at para. 22.

and patrons. If an applicant elects to use its pre-determined Category Two budget on network security services, such as advanced firewall features, DDoS prevention, intrusion protection devices, and other cybersecurity services, it most likely is making that decision thinking about the viability of the network. There simply is no reason, and it makes no sense, not to permit applicants to use their Category Two budgets to purchase what network infrastructure they deem most important.

Giving applicants greater flexibility to determine their own needs makes even more sense with the adoption of the district-wide and library system-wide budget. The Commission determined that managed internal broadband services, caching, and basic maintenance of internal connections should be eligible for Category Two support, in part, because it found that “the budgets allayed concerns about wasteful spending”⁸ This same logic applies equally to network security and monitoring. Because the same level of funding is available to each applicant regardless of which services are requested, it ensures applicants only request the services they need and provides an incentive to bargain with vendors to ensure they receive the best prices. If schools and libraries determine that network security and monitoring is necessary, they must make informed decisions based on their individual, pre-set budget. That decision may come at the expense of other technology services and equipment. But we feel it important to let applicants to procure and, thereafter, apply for discounts on what they reasonably need to build, operate, and maintain their broadband networks and in accordance with their respective local goals and objectives.

⁸ *Id.* at para. 6.

D. The Term “Firewall” Should Be Redefined and Expanded to Include Advanced Security Features

The WCB should redefine the term “firewall” in the ESL because the current definition is inadequate and outdated. When schools, libraries, and service providers discuss firewalls, they are referring to multi-function advanced security devices, not the basic firewall definition in past versions of the ESL. Because the Commission has continued to employ this definition for basic firewall products, there is widespread confusion with respect to the eligibility of firewalls and the associated features. As a result, eligibility determinations have been arbitrary and inconsistent. One applicant may request and receive discounts for an advanced device by referring to it as a “firewall,” while another may request the very same device using different terminology and receive an adverse funding commitment decision. This has also created inequities among competing manufacturers’ solutions, giving unfair advantages to some manufacturers. Under the Commission’s current definition of eligible “firewall” functionality, the eligibility of security solutions which are directly competitive in the marketplace varies wildly, incentivizing applicants to purchase vendors’ solutions which fare better in a sea of confusing and arbitrary cost allocations.

In addition, we encourage the WCB to expand the ESL to make eligible advanced network security features included in firewall products and services. First, as an initial matter and for the reasons set forth above, this network security is essential to protecting against attacks and ensuring network availability. Second, because these features are ineligible, it adds increased pressure on school and library technology budgets. Applicants are purchasing these essential protection measures even though they do not qualify for E-rate support – they simply have to look to already limited outside funds. Finally, the application and review process is complicated because network security and intrusion detection services are often bundled together with

firewalls, and applicants must perform complex cost allocations to remove the cost of ineligible features.

III. APPLICANTS SHOULD BE PERMITTED TO USE CATEGORY TWO INFRASTRUCTURE TO CONNECT ALL NETWORK DEVICES

USAC's enforcement of the rules concerning what equipment can and cannot be connected to Category Two infrastructure is inconsistent and arbitrary. Determinations are not made using clear criteria; nor do decisions appear to be based on any articulable standard. Instead, USAC seems to make determinations on a case-by-case basis, depending on the type of network device at issue, and whether it serves an "educational purpose." As a result, schools and libraries are left guessing as to which network devices can be connected to discounted cabling and data distribution equipment. If a device is determined to be ineligible, USAC requires applicants to make complex and time-consuming cost allocations to remove the associated equipment costs.

FFL urges the WCB to clarify in the ESL that all network devices may be connected to Category Two infrastructure. More specifically, we encourage the WCB to allow all on-premise devices to be connected to structured cabling and wired or wireless data distribution equipment and eliminate the cost-allocation requirement implied by current rules. On this point we agree with the comments and concerns outlined by the State E-rate Coordinators' Alliance ("SECA") in its recent *ex parte* submission.⁹ The concerns outlined by SECA, as well as important practical considerations, make such a clarification essential in the funding year 2021 ESL. At an absolute minimum, the WCB should clarify existing rules concerning network-connected devices and establish clear eligibility criteria.

⁹ *Ex Parte* Notice and Submission Requesting Educational Purposes Test to Govern Cabling and Data Distribution Equipment and Eligibility, State E-rate Coordinators' Alliance, CC Docket 02-6, (filed July 17, 2020).

A. USAC Has Misapplied E-Rate Program Device Connectivity Rules

We believe USAC has misinterpreted and misapplied E-rate rules concerning what equipment can and cannot be connected to Category Two infrastructure. As SECA correctly points out, E-rate regulations recognize that devices connected to or using structured cabling and data distribution equipment, such as switches, inside school and library buildings serve an educational purpose. The rules do not stipulate that only E-rate-eligible equipment may be connected to Category Two infrastructure. Nor do the rules specify that only equipment used by end users to access the internet may be connected to this infrastructure. Yet this is precisely how USAC has interpreted and applied the rules. What constitutes an “educational purpose” is not at all clear given USAC’s inconsistent treatment of different devices. But this appears to be the purported standard.

This approach is not only untenable and impractical; it is inconsistent with the Commission’s presumption that all activities occurring on school library property have an educational purpose and facilitate broadband activity. That a particular device is itself ineligible for E-rate funding does not mean it serves no educational purpose. Like SECA, we believe connected devices serve an educational purpose and facilitate broadband connectivity regardless of whether the device accesses the internet by end users or serves some other supporting purpose for the school or library. USAC’s approach fails to consider the myriad devices that support the operation and administration of education and the buildings in which the education occurs – all of which is essential to ensure the availability of broadband and education. Rather than continuing to employ this unworkable approach, we believe the WCB should clarify that all school-owned or library-owned devices that connect to cabling, switches, and routers have an educational purpose and eliminate the cost-allocation requirement.

B. Important Practical Considerations Require Eliminating Restrictions on Device Connectivity

Important practical considerations militate in favor of removing the unnecessary device-connectivity restrictions and the associated cost-allocation requirement. Devices that connect to the network, by their very nature, make cost-allocating impractical. Unlike network cabling, switches, and wireless access points, network-connected devices are frequently repositioned. Not only would the Commission be required to develop guidelines for cost-allocating devices, it would also need to develop the timeline for that cost allocation. Is it one year? Three years? The lifespan of the infrastructure? On any given week, in any given semester, the mix of equipment might look very different. Applicants therefore would need clear guidelines on how to preserve a snapshot of these various configurations.

C. At a Minimum, the WCB Should Provide Additional Guidance and Establish Clear Guidelines

Should the WCB decline to allow applicants to connect all on-premise equipment to Category Two infrastructure, it must, at a minimum, provide clear, “bright line” guidance concerning which devices may be connected. Clarification is necessary to curb USAC’s uneven and arbitrary enforcement of the rules, as schools and libraries are currently left guessing what devices may be connected to existing network equipment and what devices would force it to perform a complex cost allocation.

It is crucial that applicants know what network-connected devices are eligible. And the time to clarify the rules has never been more pressing, given the implementation of new and unique instructional technology due to the coronavirus pandemic. For example, USAC has routinely determined that schools may not connect security cameras to discounted Category Two cabling or data distribution equipment because, according to USAC, the cameras do not serve an

educational purpose. Given USAC's position with respect to security cameras, we question how it would determine, for example, the eligibility of cameras that are unquestionably used for instructional purposes. Due to recent safety and health concerns, many schools are purchasing cameras to stream teachers to students in home-based schooling. We believe these cameras clearly serve an educational purpose. After all, they are necessary to carry out the instruction. However, given USAC's historical treatment of network-connected devices, it is far from clear whether the equipment may be connected to structured cabling or data distribution equipment. What constitutes "educational purpose"? Where is the line drawn? These are important questions that must be addressed in the ESL. FFL firmly supports permitting applicants to connect all on-premise, school-owned or library-owned devices to discounted cabling, switches, and routers. At a minimum, though, these considerations on device connectivity should be addressed and clear criteria provided.

IV. SUB-CATEGORIES FOR CATEGORY TWO SERVICES AND EQUIPMENT SHOULD BE ELIMINATED

The FCC Form 470 requires applicants seeking Category Two support to select from three sub-categories of service: internal connections, MIBS, and BMIC. Applicants then must ensure the requested services on the FCC Form 471 match precisely those specified on the FCC Form 471. The pre-selected service categories, presumably, were put in place to facilitate USAC's application review process. In practice, however, requiring applicants to make this selection has created systemic hurdles in the funding and payment process. Moreover, under E-rate program rules, the Category Two sub-categories of service serve no practical purpose for ensuring program integrity or reducing waste, fraud, and abuse. We encourage the WCB to eliminate the distinctions between different Category Two services and treat the services as a single category comprising all eligible Category Two functionality.

A. USAC’s Use of Sub-Category Designations as a Determining Factor in Its Review and Commitment Process Leads to Unnecessary Funding Denials

The sub-category designations made on the FCC Form 470 and FCC Form 471 have become a determining factor in USAC’s application review and commitment process. It has therefore become critically important that applicants make the correct designation. If not, USAC will deny funding for an otherwise proper funding request solely because an applicant selected the wrong service.

Our experience is that applicants find the sub-categories of service confusing. The requirement has only led to opportunities for applicants to inadvertently “check the wrong box” on an otherwise descriptive form, resulting in needless procedural funding denials. What matters most is that applicants seek discounts for services that align with their original procurement while complying with state and local competitive bidding rules. The pre-selected service descriptions themselves should be just that: descriptive, not determinative. The eligibility of discounts for discounts should be based on the use and location of equipment or services, not a classification (or purported misclassification) of service from a dropdown box. Eliminating the use of sub-categories would improve the application process for schools and libraries, simplify the review and commitment process for USAC, and reduce delays and denials in funding commitments.

B. Services and Equipment May Fall into More Than One Sub-Category

Many of the services purchased by schools and libraries can fall into more than one of the regulatory classifications. This is especially true for BMIC and MIBS. Many service agreements have elements of both types of service. For example, an applicant may have a single agreement with a service provider to manage and monitor equipment it owns – i.e., MIBS – but also repair it in the event of a failure – i.e., BMIC. Both functions are eligible for Category Two discounts.

Neither is prioritized over the other. Yet, it is often difficult to ascertain what portion of a contract should be allocated to each service, and the elements of both types are often inseparable.

Consider, for example, the very recent case of a Massachusetts school district, one that has participated in the E-rate program since its inception. The District posted an FCC Form 470 notifying potential bidders that it sought bids for leased network equipment, classifying the request as MIBS from among the sub-categories of service. It then requested discounts for MIBS on its FCC Form 471. USAC denied the application because, according to USAC, the FCC Form 470 did not reflect the services received. Specifically, USAC alleged that the services should have been classified as internal connections rather than MIBS because it involved a lease of equipment. Although the District argued that, under the ESL, applicants may either lease or own network equipment as part of a managed services contract (i.e., MIBS), USAC nevertheless denied the application. As this example demonstrates, Category Two services can fall into more than one of the regulatory classifications. The request might properly have been categorized as internal connection, as USAC suggested. However, in both the current draft and previous iterations of the ESL, the services also clearly qualified for support as MIBS. This case also illustrates the very real consequences the Category Two sub-categories, and the overlap between services, can have on schools and libraries. Ensuring applicants comply with the fundamental requirements of the E-rate program's competitive bidding rules is one thing. Penalizing schools and libraries for mismatches between the services specified on the FCC Form 470 and those requested on the FCC Form 471, when both are eligible Category Two services, and the Form 470 is adequately descriptive of services sought, is another thing altogether.

C. Distinguishing Between Eligible Category Two Services and Equipment Serves No Practical Purpose Under Existing E-Rate Rules

The Category Two sub-categories serve no practical purpose under existing E-rate program rules. The E-rate program does not prioritize internal connections, BMIC, or MIBS over one another. Rather each service is funded using the same pre-discount Category Two budget. Given that there is no prioritization between the different Category Two services, it makes no sense to require applicants to make such a designation from the confusing, pre-selected service options.

Further, suspension of the former “two-in-five” rule means that Category Two services of all types can be funded in every funding year, subject to the available Category Two budget. No longer do program rules restrict the number of years an applicant can request support for certain Category Two services. Nor is it necessary for USAC to track the specific type of service or equipment requested to ensure compliance with the rule. Requiring applicants to choose among the various sub-categories of service therefore does nothing to ensure program integrity or reduce waste, fraud and abuse.

V. CONCLUSION

We feel these changes and clarifications would be of tremendous help to all E-rate stakeholders. Accordingly, and for all of the foregoing reasons, FFL encourages the WCB to adopt a final Eligible Services List for funding year 2021 that is consistent with the recommendations set forth in these comments.

Respectfully submitted,

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