



Before the
Federal Communications Commission
Washington, D.C. 20554

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

State E-rate Coordinators' Alliance *Ex Parte* Replies to Comments
Regarding
FY 2016 Draft Eligible Services List (DA 15-615)

The State E-rate Coordinators' Alliance (SECA) submits these *ex parte* Replies to Comments to address the numerous important and thoughtful questions and issues raised by various stakeholders in their initial Comments regarding the FY 2016 Draft Eligible Services List (DA-615). The parties' collective comments focused on numerous areas of ambiguity implicated by the Commission's E-rate Modernization Orders released in July and December of 2014 respectively.¹

Following the announcement of the new rules and issuance of major Orders, there inevitably has been abundance subsidiary issues and questions articulated that are not explicitly addressed in either Order or on the SLD's website. While some clarifications have been forthcoming, there remain many pending questions that applicants are earnestly seeking answers

¹ Modernizing the E-rate Program for Schools and Libraries, Report and Order and Further Notice of Proposed Rulemaking, WC Docket No. 13-184, FCC 14-99 (Order released July 23, 2015)(hereinafter referred to as "First Report and Order"); Modernizing the E-rate Program for Schools and Libraries, Second Report and Order and Order on Reconsideration, WC Docket No. 13-184, FCC 14-189 (Order released December 19, 2015)(hereinafter referred to as "Second Report and Order").

in order to be confident that they understand and know how to comply with the new program rules.²

As representatives of applicant stakeholders, and on behalf of the numerous SECA members who are on the front lines of providing education, training and outreach about the new program rules, the draft ESL proceeding offers a timely venue to obtain needed guidance on the pending eligible services questions. We encourage the Wireline Competition Bureau to carefully examine the open questions and issues raised in the ESL comments and replies to comments, and to answer these questions either in the ESL or the accompanying Public Notice that is released with the final version of the ESL.

I. The Definition Of Duplicative Services Must Be Clarified So As To Not Be Applied In An Overly Broad Manner That Undermines Achievement Of The FCC's Broadband Connectivity Goals.

CRW Consulting's comments regarding the need to clarify the scope of duplicative services is very timely and SECA concurs with this request. The origin of the present definition of duplicative services is traced back to the Second Report and Order in CC Docket No. 02-6 (FCC 03-101) released on April 30, 2003 in which the FCC explained that the funding of duplicative services is prohibited for two reasons: (1) the services are not cost effective; and (2) the services do not meet the provision in the original May 6, 1997 Universal Service Order that E-rate funding should be provided to meet the "reasonable needs and resources of applicants."³ There, the FCC found that

² SECA submitted open issues and questions to the FCC and SLD soon after the release of the First Report and Order and updated the list periodically through January of 2015 to include questions arising from the Second Report and Order. The pending questions that relate to eligible services issues are included in these *ex parte* Replies to Comments.

³ Schools and Libraries Universal Service Support Mechanism, CC Docket No. 02-6, Second Report and Order and Further Notice of Proposed Rulemaking, FCC 03-101, Paragraphs 22-24; Universal Service Order, First Report and Order, CC Docket No. 96-45, FCC 97-157, Order released May 8, 1997, Paragraph 574 (referencing the requirement that technology plans must be prepared as a prerequisite to E-rate funding "and must be based on the reasonable needs and resources of the applicant and are consistent with the goals of the program.")

“Duplicative services are services that deliver the same functionality to the same population in the same location during the same period of time.” Although the genesis of the duplicative services “doctrine” had two elements – excessive quantity of service – in addition to the excess cost issue (cost-effectiveness) over time, the doctrine has evolved to be too narrowly applied. There is insufficient consideration being given to whether the *applicant’s reasonable needs* require the receipt of the same type of service to the same location and to the same population during the same period of time.⁴

The duplicative services issue that is the most pressing to address relates to Internet access service. The FCC’s First Report and Order announced the short term and long term Internet connectivity goals of 100 mbps per 1000 users (short-term) and 10,000 mbps per 1000 users (long-term).⁵ This translates into less than 1 mbps per user in the short-term and 10 mbps per user in the long-term. These goals were established for schools in large part due to the recognition of their need for increased bandwidth to accommodate widely expanding use of Internet in the classroom, including online assessments and testing.

⁴ The FCC’s Fifth Report and Order in CC Docket No. 02-6, FCC 04-290 (Order released August 4, 2004) which announced various measures to guard against waste, fraud and abuse likewise recognized that the remedy for a finding of duplicative services would be to recoup the difference in price compared to the least expensive option, unless fraud was implicated, in which case recovery of all funding of the FRN may be warranted. See paragraph 25. This provision indicates the primary concern about the same service being delivered to the same population and same locations is the potential cost effectiveness issue.

This approach is mirrored in the Macomb Intermediate School District Technology Consortium appeal decision, FCC 07-64, File No. SLD-441910, CC Docket 02-6 (Order released May 8, 2007). The FCC found that the applicant was permitted to purchase multiple Internet access connections from different service providers when the amount claimed for E-rate reflects the most cost-effective price: “We do not find fault with Macomb ISD’s request for multiple T3 lines, provided that the services are needed. Commission rules, however, do not permit applicants to seek T3 lines from multiple service providers when the additional service providers’ bids were not the most cost-effective.” In the absence of fraud, the Commission allowed Macomb to obtain funding for all three lines based on the price associated with the least expensive service.

As explained in more detail below, we urge the Commission to clarify that the Macomb approach may be used by applicants that choose to make purchases of Internet from more than one vendor in the course of the same Form 470 procurement.

⁵ First Report and Order at Paragraph 34.

Many applicants have found that their current procurement for Internet access service does not provide them with sufficient bandwidth quantity and they need to purchase more Internet. The applicant will then post a new form 470 in a later year to obtain additional bandwidth and a different vendor may be selected as most cost effective. The applicant will then submit two different FRNs for the same service – for example, Direct Internet Access (point to point) with two different contract award dates, expiration dates and two different SPINs. The same service is being delivered to the same location and same population because the larger quantity is needed to meet the reasonable needs of the applicant. Technically under a narrow interpretation of the duplicative services doctrine, the application is flagged for PIA review and may result in the disallowance of the more expensively priced FRN. Such an outcome diminishes the applicant’s ability to secure sufficient bandwidth and also undermines the applicant’s ability to meet the FCC’s connectivity goals.

We believe that this concern will be resolved by adopting the following clarification that builds on language suggested by CRW Consulting in their Initial Comments:

“Multiple connections to the Internet serving the same location are eligible and are not considered duplicative services when they are actively in use during the funding year, [and] are based upon the reasonable needs of the applicant and the FCC’s Internet Access Service connectivity goals, and comply with the E-rate competitive bidding requirements.”

These clarifications provide applicants and the SLD with the needed guidance to ensure that funding may be sought and approved for multiple Internet FRNs as long as the service is needed to meet the FCC’s connectivity goals and/or the applicant’s reasonable needs, keeping in mind that the applicant’s needs may differ from the connectivity goals. This means that applicants may have two FRNs with two different vendors with two different contract award dates for Internet access service because there would no longer be a presumption that the services were duplicative. Instead, the presumption would be that the applicant needed the quantity of bandwidth made available from both contracts in order to meet their Internet needs.

Further, in compliance with the Fifth Report and Order in CC Docket No. 02-6 and the Macomb appeal decision as described in Footnote 4 above, the FCC should make clear in the ESL that applicants may choose to purchase Internet access service from multiple service providers arising from the same Form 470 procurement, as long as the pre-discount price for each FRN is based on the pre-discount price charged by the most cost-effective bidder. Applicants should be permitted to plan their procurements to ensure reliability of service as long as there is no financial impact on the E-rate fund and the competitive bidding requirements are met. A multiple award should be allowed for the most cost effective bidder and the other bidder(s) that had the next highest score(s) in the bid evaluation.⁶

II. The Definition Of Modulating Electronics And Any Other Equipment That May Be Purchased And Eligible For Category 1 Funding For Dark Fiber And Self-Provisioned Fiber Network Installations Must Be Precisely Articulated.

E-rate Provider Services, LLC, New York City Department of Education and the Illinois Department of Central Management Services each raised several questions and issues concerning which equipment meets the definitions of (1) modulating electronics and (2) “equipment necessary to make a broadband service functional.” The draft ESL proposes that both categories of equipment are eligible to be purchased and installed as part of an end to end solution for dark fiber and self-provisioned fiber.

The purchase and ownership of equipment under Category 1 is a wholly new concept not

⁶ We do not share the same concern with respect to T-Mobile’s duplicative service discussion regarding wireless data cards for Internet access when they are used in a building that has a wireless Internet access network. T-Mobile mentioned that the company has raised these issues in a pending petition for reconsideration. It may possible that a building may have some areas that have structural limitations that would prevent adequate Wi-Fi coverage and therefore warrant the use of wireless data cards. But nothing in the language of the ESL or the Commission’s First Report and Order prohibits an applicant from seeking funding for these air cards and presenting such information to the SLD to overcome the “implication” (basically the presumption) that the air cards constitute duplicative service. For this reason we do not believe any modification to the ESL language is necessary.

previously implemented for any other service. Its implementation must also be mindful that all other equipment purchases under Category 2 are constrained by the \$150 per student pre-discount budget and are limited to school buildings. Use of the equipment by a non-instructional facility must be cost allocated and deducted.

Neither the NIF restriction nor the \$150 per student budget restriction are constraints that apply to the Category 1 purchase of equipment. Accordingly there may be a built-in incentive for stakeholders to try to seek an expansive interpretation and application of the definition of equipment that would qualify for Category 1 purchases. In order to provide sufficient guidance and to avoid gamesmanship of the rules, we encourage the FCC to narrowly define the equipment that is eligible for C1 purchase and that would be exempt from the C2 budget and NIF cost allocation rules.⁷

Initially, we believe that the language “equipment necessary to make a broadband service functional” should be removed from the ESL. The source of this language appears to be in Paragraph 35 of the Second Report and Order, and was mentioned in reference to describing the implementation of the dark fiber provisions of the Healthcare Connect Order. In the next paragraph of the Second Report and Order, however, where the FCC announced the rules that will apply to E-rate, the FCC’s language is more narrow, and states, “we will provide category one support for special construction charges for leased dark fiber, as we do for leased lit fiber, and we will provide category one support for the modulating electronics necessary to light leased dark fiber.”⁸ There is no mention of any other Category 1 support for *other* equipment purchases.

This limitation is likewise sensible and necessary given that E-rate differs markedly from the Healthcare Connect program that has been historically under-subscribed and has only a single “category” of eligible services and equipment. The E-rate program has been historically over-

⁷ Consistent with the requirements for the lease of Category 1 equipment, the applicant’s local area network may not be dependent on the purchase of Category 1 equipment.

⁸ Second Report and Order, Paragraph 36.

subscribed and Category 2 equipment purchases are now subject to the \$150 per student or library patron pre-discount budget. An expansive interpretation of the equipment that may qualify for Category 1 funding could thwart the goals of imposing budgetary and funding restrictions on applicants.

We believe that the language suggested by E-rate Provider Services, LLC in their Initial Comments is a sensible approach that should be adopted.⁹ The definition of modulating electronics should be explicitly stated as:

- Fiber Optic or other mixed-media transceivers, i.e. fiber to copper, microwave to copper, etc.; and
- Appliance-based form-factor CPE routers; and
- Chassis-based form-factor CPE routers, which can include power supplies, supervisory modules, DWDM or other optical switching gear; all LAN/WLAN specific gear must be cost-allocated out and paid for separately or applied against the applicant's Category 2 budget.

We believe this definition provides stakeholders with the direction and bright line boundary needed to ensure that their applications comply with program rules and fulfill the intent of the new E-rate program.

III. The FCC Should Clarify The Eligibility Requirements For Special Construction Charges.

The draft ESL proposes to define special construction charges as “upfront, non-recurring costs of deployment of new or upgraded facilities, including design and engineering, project management, and construction of network facilities.” The Illinois Department of Central

⁹ Under this approach, many of the questions raised by the New York City Board of Education concerning the eligibility of certain devices for purchase under Category 1 in conjunction with a dark fiber or self-provisioned fiber solution would be answered in the negative.

None of the following components would be eligible under Category 1 funding: network switches at the access, distribution and core layers; device management servers used to manage large numbers of various network device types (switches, routers, etc.) (both hardware and software options); network reporting performance servers, firewalls and application delivery servers. These components were specifically identified and questions concerning eligibility were raised in the New York City Board of Education’s Initial Comments. While most of these components may be eligible under Category 2, the servers are ineligible.

Management Services raised some specific questions that we encourage the FCC to address, such as whether the modulating electronics costs are part of the special construction charges, whether the costs for a dark fiber IRU may qualify as special construction charges, and whether the purchase of new or replacement modulating electronics may qualify for E-rate in a network that has already been constructed and owned by an applicant. In addition, SECA requests clarification that the provisions relating to special construction charges apply to all applicants including state and regional consortia applicants that facilitate the provision of state and regional wide area network broadband services.

With respect to the questions raised by Illinois, we believe that modulating electronics should be included as part of the definition of the construction of the network and accordingly would be eligible as special construction charges for both new and existing network installations. We do not believe it would be appropriate to establish a hard and fast rule for how frequently applicants may purchase new or replacement modulating electronics because the wide variation on the reasonable needs of each applicant; however, we could foresee that applicants with frequent or repeated requests for special construction charges associated with modulating electronics may be asked to demonstrate that such purchases are cost effective.¹⁰

We also believe that the relief from the amortization requirement for special construction charges should apply to the installation of a dark fiber indefeasible right to use long term agreement; however, the prepayment of monthly lease costs should not qualify as special construction – just as these payments would not qualify for leased lit fiber service. The prepayment of monthly recurring costs under the guise of special construction charges could pose a substantial financial burden on the E-rate program and we believe that this was not the intention of the FCC when it decided to waive the amortization requirements for special construction charges.

¹⁰ We also believe that the equipment transfer and disposal rules that apply to Category 2 equipment should also govern purchased Category 1 equipment.

We also seek clarification of which special construction charges may qualify for the additional discount up to 10% as explained in the Second Report and Order:

To encourage state participation, beginning in funding year 2016, we will increase an applicant's discount rate for special construction charges up to an additional 10 percent in order to match state funding the applicant receives on a one-dollar-to-one-dollar basis.¹¹

The regulatory language states, in pertinent part:

When a State government provides funding for special construction charges for a broadband connection to a school or library the Administrator shall match the State's contribution on a one-dollar-to-one-dollar basis up to an additional 10 percent discount, provided however that the total support from federal universal service and the State may not exceed 100 percent.

We want to confirm that a state government agency that currently pays for the non-discounted portion of broadband services (circuits and/or Internet) for some or all of its applicants may qualify for the additional 10% discount when the agency incurs special construction charges to establish new or larger connection speed circuits to E-rate eligible entities.

These funds would need to be monitored as anticipated in the Second Report and Order, Paragraph 15, so as to ensure that the allocation of funds for special construction charges -- including the additional discount of up to 10% for state matching funds -- does not cause a shortage of funds available for Category 2 commitments. In light of the higher annual funding cap announced in the Second Report and Order, we hope that this will not be a concern. In any event, we do not want to create a situation where applicants cannot obtain full funding of both their Category 1 and Category 2 requests due to increased demand for funding of special construction charges.

¹¹ Second Report and Order at paragraph 56. The regulation is found at 47 C.F.R. Section 54.505 (f).

IV. The Eligibility Of Maintenance Of Fiber Services Under Category 1 Should Be Clarified.

The draft ESL states that for Category 1 services, maintenance and technical support appropriate to maintain reliable operation are eligible for support when provided as a component of the services. The draft ESL also states that with respect to lit fiber, dark fiber and self-provisioned fiber solutions, maintenance charges are eligible provided that they are competitively bid. Illinois Department of Central Management Services sought clarification that the maintenance charges on an existing network service are eligible provided that the service is competitively bid. They specified the following tasks that should be included within the definition, with which we agree and encourage that this level of detail be explicitly articulated in the ESL:

- Scheduled and routine maintenance including network monitoring to detect and repair problems. Ongoing operation of the network service are also included.
- Emergency repairs when outages occur and need to be repaired to restore service
- Other maintenance activities that may occur occasionally such as “call before you dig” identification of facilities and relocation of facilities that may need to occur from time to time.

We also wish to clarify that the restriction that applies to Category 2 equipment maintenance -- that reimbursements will be paid only for actual work performed -- does not apply to Category 1 maintenance of fiber services. This is because the service is analogous to the maintenance service including network monitoring like that available in Managed Internal Broadband Services. In order to ensure that the facilities are maintained appropriately, they need to be monitored continuously in order to be able to detect and correct problems. If funding is limited to only those maintenance charges incurred then the service will not be truly analogous to the type of maintenance service available for other Category 1 data transmission services.

V. The FCC Should Provide Explicit Guidance Regarding The Evaluation of Self-Provisioned Fiber Solutions.

Consistent with the Second Report and Order, the draft ESL proposed to include self-provisioned broadband networks as an eligible Category 1 service. Unite Private Networks, LLC submitted extensive comments on the proposed Total Cost of Ownership analysis that the company believes that applicants must undertake in evaluating the cost effectiveness of a self-provisioning solution compared to a leased lit or dark fiber solution.

Although we do not agree with their substantive recommendations, we concur that there is a dearth of written guidance that should be rectified as quickly as possible to ensure that applicants and service providers understand the self-construction requirements such as:

- An RFP must be issued with the posting of a Form 470.
- When an RFP for self-construction is issued, it must have been either preceded with a Form 470 for dark and lit fiber service, or the RFP must solicit bids for dark and lit fiber when requesting bids for a self-construction option.
- The Commission should articulate what it means by “total cost of ownership over the useful life of the facility for applicants who pursue the self-construction option.” See Second Report and Order at Paragraph 48. We believe that the list of factors should be articulated so that applicants can be sure to include the factors in their RFPs and the associated prices that they receive in bids from service providers.¹² One approach may be to rely on a range of useful lives such as five to 20 years as mentioned by the SLD in Slide # 20 of its Fiber Options service training presentation from June 2015. As stated there, applicants should be guided to determine a reasonable, defensible period of time for the comparison, based on their anticipated use of the assets and use this time period for the bid evaluation and selection of the most cost effective option.
- If applicants wants to obtain operation and maintenance service, this must also be explicitly included in the RFP and Form 470.
- If the applicant wants to purchase modulating electronics, this too must be explicitly included in the RFP and Form 470.

¹² We do not agree with the list of factors set forth by Unite Private Networks LLC because some of the tasks may be undertaken by the vendor and some may be undertaken by the applicant. Also we disagree with their claim that self-construction is available only as an option of last resort. This is contrary to the Second Report and Order that states that self-construction is available where it is the most cost effective solution after also considering and evaluating leased lit and dark fiber solutions.

VI. The Category One Section Of The Eligible Services List Should Be Reorganized And Aligned With The Services Information Collected On The Item 21 Portion Of The Form 471 Application.

EducationSuperHighway commented that the draft ESL should be updated to remove outdated technology services and condense any duplicate entries. SECA has reviewed their suggestion and also engaged in a collaborative project with them to make suggested revisions to the Form 471 Item 21 services related information. The revisions are intended to improve the instructions to ease applicants' burdens and also improve the quality of the information submitted.

The technology types for data connections that should be listed in Category One should be as follows:

- T1/DS1, T3/DS3, Frame Relay
- DSL
- Cable Modem
- Leased Dark Fiber/Wavelength Services
- Ethernet
- OC-N (TDM fiber)
- Satellite
- Fixed Wireless/Microwave
- Mobile Broadband/Hotspot
- Telephone Dial-up
- MPLS
- Internet access service from an applicant's building directly to the Internet service provider
- Internet access service with no circuit

These descriptions would then be used by applicants to solicit bids on their Form 470s (and RFPs) and hopefully would make it easier for applicants to complete the Item 21 portion of the Form 471 application.

The draft ESL has a general instruction that if a service or component is not mentioned on the list, then the service or equipment is ineligible. We believe that this general instruction should not apply to the list of Digital Transmission Services and Internet Access Services because the list was always meant to be illustrative and not all inclusive. For example, in the 2014 ESL the language

stated, “Eligible digital transmission technologies include, *but are not limited to, ...*” (Emphasis added). We believe that the italicized language should be added back to the FY 2016 ESL.¹³

VII. Other Equipment Eligibility Questions Should Be Answered By The FCC.

A. Network Management Services Should Be Eligible As Part of Managed Internal Broadband Service And Maintenance.

Funds for Learning made a compelling case for allowing network management services to be eligible under either MIBS or maintenance. There should be no distinction – since it is now up to applicants to determine how best to use their limited Category 2 funds. This is particularly important in terms of applicants that may bid for MIBS but not for maintenance and may receive bids for monitoring services as part of maintenance. During PIA review applicants are being required to cost allocate and deduct monitoring related costs unless they specifically articulated this service request as part of their form 470 under MIBS. Frequently vendors may offer the functionality requested by applicants as part of maintenance as opposed to part of MIBS.

B. Wired Controller Devices Should Be Eligible Under Category 2.

HP requested wired controller devices to be eligible under Category 2 in addition to wireless controllers. This makes sense to ensure that technology neutrality between wired and wireless network solutions is preserved.

¹³ SECA does not support the notion that applicants seeking funding for services with a transmission speed of less than 25 mbps should have to provide additional information. EducationSuperHighway wants to require applicants seeking funding for data transmission service or Internet access service with a download speed of less than 25 mbps to have to report on the price of a higher speed connection or if none is available, then where the closest available high-speed network node operated by that service provider (e.g., a splice point or wire center with fiber-capable equipment) is located. Applicants have no way of knowing this information and it would be very burdensome for them to have to try to figure out the answers to these questions.

C. Software Defined Network Solutions of Eligible Equipment Should Be Eligible.

There is no reason not to allow for virtualized equipment options to be eligible, provided that the equipment itself would be eligible.

D. Next Generation Firewall Should be Eligible.

This request was submitted by numerous parties including Funds for Learning and Education Super Highway among others. FFL made a convincing case for how the purposes and features of firewall have evolved since the equipment first was designated as eligible over 10 years. A cost allocation requirement makes the program more complex and burdensome for applicants and the administrator and should not be necessary in light of the imposition of the Category 2 budgets.

VIII. Conclusion

The State E-rate Coordinators Alliance requests the FCC to revise and finalize the 2016 E-rate Eligible Services List consistent with the recommendations set forth herein.

Respectfully Submitted by:

/s/ Gary Rawson

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