

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

In The Matter of )  
 )  
Proposed Eligible Services List for the E-rate Program ) WC Docket No. 13-184

**Comments of EducationSuperHighway on the FY2016 Draft Eligible Services List**

EducationSuperHighway respectfully submits these comments regarding the draft E-rate Eligible Services List for funding year 2016 (FY2016 ESL) in response to the Wireline Competition Bureau’s request in the Public Notice of May 21, 2015.

We believe that the 2016 Eligible Services List successfully incorporates the changes necessitated by the full implementation of the *Second E-rate Modernization Order* and represents continued improvement to the E-rate program. We offer the following suggestions for the upcoming program year based on the Bureau’s questions and text of the draft FY2016 ESL:

**1. References to Outdated and Duplicative Services Should be Removed from the Eligible Services List.**

The current Eligible Services List is an inclusive list, representing a wide variety of applicable technologies used over the lifetime of the E-rate program. While this has the potential to provide the maximum amount of flexibility to applicants, the direct translation of this list to selection options on the Form 471 leaves many applicants with more than one seemingly correct option, thus undermining applicant experience and the quality of the data with respect to the services that are actually being used by participants.

We recommend the removal of the following services as deprecated: ATM, SMDS, Frame Relay, Fractional T1s and T3s, and Broadband over Power Lines. We also recommend removing the generic “Ethernet” as an eligible service and clarifying that Lit Fiber service should be interpreted as Ethernet over Fiber. In a similar vein, we recommend rewording the item for SONET/SDH optical services (i.e., OC-n) to be more clear for those applicants still using that technology directly. Ethernet over Copper services should continue to be eligible (notwithstanding comment #5 below), but be designated as such (e.g., Ethernet over Copper) in order to provide clarity as to which applicant locations are connected via fiber as opposed to copper physical plant.

**2. Eligibility of Design, Maintenance, and Operational Services for Self-Provisioned Networks In Funding Years Before or After Construction Should be Clarified.**

Applicants considering investment in self-provisioned fiber networks will need to consider the most cost-effective way to design, operate, and maintain their networks. While some or all of these services could be bundled with construction costs, they will sometimes be incurred independently of network construction. The ESL currently offers a broad definition, listing “Self-Provisioned Broadband Networks” as an Eligible Service, but this provides minimal clarity to applicants and other stakeholders about how to categorize and account for these services through the whole lifecycle of a self-provisioned network (before and after construction). We suggest additional guidance is needed, either as part of the ESL directly or through complementary educational materials.

In addition to providing clarity, guidance with respect to these services will help applicants account for all related eligible services when evaluating the full cost of owned fiber construction so that all options are considered completely and the most cost-effective option is selected.

### **3. Rules and Categorization for Construction Projects Spanning Multiple Funding Years Should be Documented.**

In working with districts to help them understand and evaluate potential fiber construction projects (either self-provisioned or as service providers extend their network), it is clear that overall project durations can potentially span multiple E-rate funding years. Even on smaller projects of less than a year's total duration, spanning E-rate funding cycles may be best from a project management perspective, for example to concentrate construction during the summer months when weather is most favorable. Therefore we suggest the Bureau codify the rules and provide guidance to applicants such that project schedules can be optimized for success and cost efficiency with minimal negative impact from attempts to conform to the traditional E-rate calendar.

### **4. Firewall Services Eligible in Category Two Should Include Both Internal and External Implementations.**

We believe this is consistent with the intent of the current ESL draft, but the categorization of Firewall Services under the category of "Eligible Broadband Internal Connections" may cause confusion for applicants and other stakeholders evaluating Firewall Services hosted by a service provider. We suggest clarifying that these services are eligible for Category Two funding no matter the nature of the architecture and implementation.

### **5. Funding of Internet Access Services <25Mbps Should Require Applicant to Establish No Faster Service is Available.**

Consistent with the findings of the *2015 Broadband Progress Report*<sup>1</sup>, Internet access services providing a download speed of less than 25Mbps and 3Mbps upload speeds should not be considered broadband services. Given the goals established in the *Second E-rate Modernization Order*, support of non-broadband services should be continued only in cases where broadband service is not available to the applicant.

In light of these precedents, we renew our recommendation from funding year 2015 to collect data from the relevant applicants and their service providers in order to document:

- if a faster connection was an available option, what price that connection was available at, or
- if no faster connection speed is available to that location, the distance to the closest available high-speed network node operated by that service provider (e.g., a splice point or wire center with fiber-capable equipment)

This data collection will allow the Commission to effectively plan to phase out the eligibility of these non-broadband networks over time, once faster services are available, while imposing no additional reporting burden on the vast majority of districts who already receive their connectivity over high-speed circuits.

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<sup>1</sup> *2015 Broadband Progress Report* paragraph 3, released February 4, 2015, GN Docket No. 14-126

## **6. Only Circuits with Dedicated Voice Bandwidth Should Require Cost Allocation**

We agree with the decision to require cost allocation if bandwidth on a shared circuit is completely dedicated to voice services, but we suggest clarification that circuits that carry VoIP traffic mixed with general Internet traffic such that the full circuit speed is available for Internet use when needed (subject to quality of service) should not require cost allocation, since this is one of many traffic types that should be supported on a properly implemented integrated network.

The marginal cost of any additional bandwidth used for voice services specifically in this case is both relatively small and potentially difficult to establish with consistent policy, so we believe it's in the best interests of the program to promote ease for applicants in this case.

Respectfully Submitted,

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