

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

In The Matter of)	CC Docket No. 02-6
)	GN Docket No. 09-51
Draft Eligible Services List for)	WC Docket No. 13-184
Schools and Libraries Universal Service Program)	

Comments of EducationSuperHighway on the FY2015 Draft Eligible Services List

EducationSuperHighway respectfully submits these comments regarding the draft E-rate Eligible Services List for funding year 2015 (ESL) in response to the Wireline Competition Bureau's request in the Public Notice of August 4th, 2014.

Overall, we believe that the proposed ESL is a positive step forward in realizing the Commission's vision as established in the E-rate Modernization Order. Based on the Bureau's questions in the Notice as well as the proposed ESL, we offer the following suggestions for the upcoming program year:

1. Only Broadband Services Should Be Eligible, Unless No Other Options Are Available.

Unfortunately, a significant number of schools still connect to the Internet with T-1s and other services with a per-circuit speed of less than 4Mbps. These services do not meet the Commission's definition of broadband for residential use, much less for a community anchor institution, and thus need to be re-examined in light of the focus on broadband access adopted in the Modernization Order.

We recognize that most applicants who are using these services do so because high-speed broadband options are not yet available to them, and simply declaring these services ineligible would only make a bad situation worse.

Instead of eliminating eligibility, we propose that the Bureau and USAC 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.

We note that many districts have high-speed networks for data but continue to use T-1s as part of their voice networks, and suggest no further data collection with respect to these circuits since these services are already subject to the voice services phase-down in funding years 2015 and 2016.

2. Caching Systems Must Support the Goal of Using E-rate Funded Connections More Efficiently.

We agree with the Commission's determination that caching "can, in certain circumstances, optimize network performance, and potentially result in more efficient use of E-rate funding."

Based on this rationale for the inclusion of caching services, EducationSuperHighway suggests that eligible caching services should be defined as those that demonstrably reduce the need for bandwidth on one or more telecommunications lines currently funded as a Category 1 service.

We believe that this type of flexible definition is the best match for a new service and that, at most, applicants need only offer a brief description of how caching equipment or services are going to be used (i.e. where in the network they will be placed and what traffic they will cache). Even this description may be unnecessary in the short term, since the establishment of a Category 2 budget per student should be sufficient to prevent waste, fraud, and abuse.

Within this definition, the purchase and operation of caching devices as either capital equipment or as a managed service should both be viable options, and applicants may reasonably prefer either based on their network architecture and existing service provider arrangements.

3. Transparency Requirements for Managed Internal Network Services.

We believe the eligibility of managed services for internal connections will give applicants significant new flexibility in deciding how to meet their LAN and Wi-Fi needs, and we expect many applicants will be excited to include managed service providers when considering the best and most cost-effective way to upgrade their in-school networks.

In order to provide effective stewardship of E-rate funds, we suggest that the Bureau and USAC take steps to make sure that detailed data is gathered on the services provided and their costs for all internal connection managed services. This data will allow future purchasers to effectively compare managed service options with traditional capital equipment options, as well as managed service providers with each other.

Key data elements should include, at a minimum, the services provided, equipment deployed (if bundled with the services), the service costs, service level agreements, and the disposition of any equipment at the end of the term. We expect this list is incomplete and encourage contributions from other commenters.

4. Ethernet WAN Fiber Transceivers Should Be Eligible Components of Category 2 Switches and Routers.

Since the Commission's action to restore the eligibility of dark fiber services in 2010, many school districts have utilized this cost-effective method of connection, particularly for their district wide-area networks (WANs). While the Commission correctly notes that the cost of transceivers (a.k.a. dark fiber modulating electronics) is a relatively small capital investment, their exclusion makes little technical sense given that the identical parts are eligible when used for connectivity between switches within the same premises.

Because these Ethernet fiber transceivers are highly cost-effective and beneficial to applicants, we suggest they be considered eligible components (e.g., in the form of an SFP or SFP+ module) of switching and routing equipment,

which is already generally eligible in Category 2. These transceivers should be allowed regardless of type (single-mode or multi-mode) when they are used to light fiber links serving E-rate eligible locations, including dark fiber leased by applicants (and eligible for E-rate) as well as dark fiber owned by applicants (where the fiber itself is not eligible).

5. No Other Additions Should Be Made to the C2 Eligible Services List at This Time.

While there are many other areas of network infrastructure that may be worthy of E-rate funding in the future,¹ we expect E-rate to continue to be cost-constrained pending further action from the Commission. Until the effects of the E-rate Modernization Order are more well understood, we suggest that no additional classes of items should be added to the ESL so that resources can stay focused on the Commission's goals of high-speed LAN and Wi-Fi availability in every classroom within the next 5 years.

6. The Bureau Should Continue its Effort to Simplify and Clarify the ESL.

We applaud the efforts of the Bureau and USAC to simplify the ESL. We believe that continuing this effort will not only make the document easier to understand for applicants, but it will reduce the confusion and ambiguity that can lead to time-consuming appeals.

To further this effort, we suggest removing some items listed as eligible but no longer generally offered on the market, such as Telephone Dial-Up, Fractional T-1s (for data), and SMDS.

We also suggest retaining a simplified version of the explanatory language from the FY2014 ESL. Topics like cost allocation can represent significant administrative challenge, especially for those applicants not familiar with all of the modifications to the relevant rules. For example, content filtering is identified as an ineligible service that must be cost allocated,² but no example or further guidance is provided. As noted in the Public Notice for the FY2015 ESL, USAC provides significant guidance on this subject but there is no linkage. An online version of the ESL with links to the appropriate supporting and explanatory documents created by USAC could make a significant improvement to the usability of the ESL, especially for new applicants.

Respectfully Submitted,

/s/ Evan Marwell

Evan Marwell
EducationSuperHighway
101 California Street, Suite 4100
San Francisco, CA 94111
(415) 967-7430

¹ e.g., "further security services" as mentioned in the E-rate Modernization Order, paragraph 121, which we expect will become increasingly necessary for most applicants in future funding years.

² While we understand the logic outlined in the 2001 CIPA Order, paragraph 54, this remains a significant omission from the eligible services list that we believe ultimately undercuts the Commission's overall goals.