On July 23, 2014, the Federal Communications Commission (FCC) released the E-rate Modernization Order, marking the most significant reform to the E-rate program since its inception in 1997. The E-rate modernization process commenced a year ago following President Obama’s announcement of the ConnectED initiative that aims to accelerate deployment of education technology across the nation, and of which reform to the E-rate program is a key component.

The E-rate Modernization Order is an important step in focusing the program on broadband capacity, particularly by providing immediate, substantial support for on-campus wireless networks within schools and libraries. The Order provides for up to $2 billion in funding over the next two years to on-campus wireless networks that will, in particular, help schools deploy 1:1 device learning models and enhance public wireless Internet access at libraries. These funds will be allocated to schools and libraries based on a per-student and per-square foot formula, respectively. The goal for these funds is to bridge the “Wi-Fi gap” that, according to the FCC, is present in at least three out of five schools.

The action also marks a key milestone in the Commission’s efforts to revamp and reorient all four of its universal service subsidy programs away from legacy services and toward broadband services. In particular, the E-rate Modernization Order phases out E-rate support for legacy services such as dialtone voice. The Order also streamlines the application process and makes better, more transparent data on the E-rate program available.

Creation of Dedicated “Category 2” Fund to Support Internal Wi-Fi Connections

The most significant step in the FCC’s action is the creation of a new sub-fund within the E-rate program that is dedicated to upgrading internal networks and on-campus Wi-Fi connections at schools and libraries. This “Category 2” fund essentially replaces what has been historically regarded as “Priority 2” services. The new Category 2 fund will provide support for equipment, installation, and maintenance for Wireless Local Area Network (or Wi-Fi) connectivity within schools and libraries to student, teacher, and library patron devices.

The FCC has budgeted $5 billion for this fund over the next five years. While the FCC has already identified $2 billion that may be available to fund Category 2 services over the next two years above and beyond the overall E-rate annual funding cap of $2.4 billion, funding for years 3-5 of the program remains uncertain.

The true extent of this new funding for internal school and library networks will depend upon several factors, including school and library demand for broadband connections to and within their facilities. Funding for broadband connections to schools and libraries (now called Category 1 services) will take priority over funding for on-campus networks. However, the FCC feels confident that the additional $2 billion it has directed to the E-rate program over the next two years will be sufficient for robust investment in on-campus wireless networks.

Allocation of New Category 2 Funds among Schools and Libraries

The FCC will allocate and distribute these additional funds for internal on-campus networks differently than it has distributed E-rate funds in the past. The FCC has established a maximum funding support level
per eligible applicant over a five year period. The subsidy is a discount off retail prices of purchased services, and the level of subsidy available is a function of household income levels of the surrounding neighborhood and whether the school or library is located in a rural area (see below for additional details). The maximum discount available to a school is a function of the number of students in the school, while the maximum discount available to a library is based on its physical size. Because E-rate is a discount rate program over retail prices, schools and libraries will need to invest their own funds into these networks to take full advantage of this opportunity.

Schools may request E-rate subsidies for internal networks on purchases up to $150 (on pre-discount expenditures) per student over a five-year period. Therefore, for example, over a five-year period, a school district entitled to an E-rate discount of 80 percent will be able to request up to $120 in E-rate support per student (80 percent of $150). To receive those E-rate funds, the school district will need to invest a match of $30 per student (20 percent of $150) over the five-year period. In contrast, a school district at the 20 percent discount level will be able to seek up to $30 per student over a five year period from E-rate. To receive those funds, it will have to invest $120 per student into the on-campus infrastructure upgrade.

Libraries can request subsidies on purchases up to $2.30 per square foot over a five year period. As a result, a library with 10,000 square feet will be eligible for discounts on purchases of up to $23,000; a 10,000 square foot library at the 80 percent discount level can request up to $18,400 in E-rate funding; while a 100 square foot library at the 20 percent discount level can request up to $4,600 over a five-year period.

For small school and library facilities, there is a minimum funding floor available of $9,200 pre-discount over a five-year period.

These funding caps will apply for Category 2 requests in funding years 2015 and 2016. Thereafter, the FCC will examine this allocation method for internal on-campus networks and adjust it as necessary.

This is a significant change from the way E-rate funds have been allocated previously. In the past, there were no annual funding request limits for applicants - funds were allocated based solely on the income of the neighborhood in which the school and library is located through a sliding scale of discounted rates. While the overall program was capped at $2.4 billion per year, no funding caps existed for a school or library, or an applicant seeking funds on their behalf. When aggregate funding requests were greater than available funds, the FCC rationed subsidies by prioritizing funds for the schools and libraries most in need as determined by those that received the biggest discount rate under the program. This design led to occasions in which a few, large-discount school districts were regularly able to obtain large subsidies for internal connections, while many other schools or libraries in need were unable to obtain any support for these services. The new per-beneficiary caps for internal connections aim to allocate funds more broadly.

Additionally, while the FCC maintains the historical discount matrix for Category 1 services, the new Category 2 fund will use a slightly different discount matrix. Under new rules, the discount would apply to a whole school district and libraries therein.
New Schools and Libraries Discount Matrix

<table>
<thead>
<tr>
<th>% of students eligible for National School Lunch Program</th>
<th>Category 1</th>
<th>Category 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban discount</td>
<td>Rural discount</td>
</tr>
<tr>
<td>&lt; 1</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>1-19</td>
<td>40</td>
<td>50</td>
</tr>
<tr>
<td>20-34</td>
<td>50</td>
<td>60</td>
</tr>
<tr>
<td>35-49</td>
<td>60</td>
<td>70</td>
</tr>
<tr>
<td>50-74</td>
<td>80</td>
<td>80</td>
</tr>
<tr>
<td>75-100</td>
<td>90</td>
<td>90</td>
</tr>
</tbody>
</table>

Broadband Service to the School and Library Premises will be Prioritized through the Phase-out of Voice and Legacy Services

The other key change in the E-rate Modernization Order is the phase-out of E-rate subsidies for legacy and voice services. The FCC estimates that approximately half of the current E-rate fund is spent on legacy services and technologies. As a result, this change will have an immediate impact on the level of funding that schools and libraries will receive from E-rate.

Historically, voice and legacy services have been classified as Priority 1 services along with broadband access to the school or library. The FCC has published a lengthy “eligible services list” (ESL) for Priority 1 services that included services ranging from voice telephone service to pagers, to e-mail servers and broadband connectivity. All of these services received identical funding priority and, as long as the applicant could demonstrate that it was purchasing a service on that eligible services list, it would receive funding.

The E-rate Modernization Order changes this process as early as next funding year.

The Order eliminates certain legacy services such as paging, e-mail, voicemail, and web hosting from the eligible services list. The Order also phases out other legacy voice services, whether fixed or mobile, over the next four years by lowering the available discounts by 20 percentage points per year.

These changes will have, in many cases, a substantial impact on school and library budgets. For example, if a school district in the 80 percent discount category is currently spending $10,000 on voice services per year, it currently receives E-rate funds of $8,000 per year for that voice service. Beginning next year, it will receive only $6,000 (60%). In 2016, it will receive $4,000 (40%), $2,000 (20%) in 2017, and nothing thereafter.

Data plans and air cards for mobile devices will continue to be eligible for E-rate support, but only when the school or library seeking support demonstrates that individual data plans are the most cost-effective option to provide internal broadband access for portable mobile devices at schools and libraries.

The FCC estimates that these rule changes will free up approximately $300 million in voice and legacy services in 2015, $600 million in 2016, $800 million in 2017, $900 million in 2018, and $950 million in 2019. The FCC expects that these cost savings will help fund its target connectivity goals.
Establishment of Connectivity Targets across Schools and Libraries

The E-rate Modernization Order establishes broadband connectivity targets across schools and libraries. These targets generally follow last year’s FCC proposal:

- **Internet Access** – The FCC establishes a target of at least 100 Mbps per 1,000 students and staff (users) in the short term, and 1 Gbps per 1,000 users in the long term.
- **District and Library Wide Area Networks** - The FCC establishes a target for school district wide area networks at a “scalable capacity” of 10 Gbps per 1,000 students.
- **On-Campus Networks (Internal Connections)** – The FCC declined to set a specific bandwidth target for the capacity of on-campus school and library networks at this time.

In the future, success of the E-rate program will be measured against these targets. To do so, the FCC, working with the Universal Service Administrative Company (USAC), will develop a data strategy that will enable detailed, granular information regarding the level of connectivity, type of service, associated technology, prices paid, and other data for each school and library receiving E-rate support. The data will also include information that evaluates actual broadband usage and network performance in order to help refine future connectivity target measures.

Streamlining the E-rate Application Process and Encouraging Program Transparency

The E-rate Modernization Order attempts to streamline the E-rate application process and increase program transparency. The FCC and USAC will release data regarding type of service and prices paid for those services across all beneficiaries. Increased transparency will encourage greater price competition and help applicants make better technology choices. The Order also establishes rules aimed to encourage consortia purchasing and further emphasizes that providers of E-rate supported services must offer the lowest corresponding price.

To make E-rate processes fast, simple, and efficient, the Order simplifies the application process for multi-year contracts; exempts low-cost, high-speed business-class broadband services from the competitive bidding requirements; eases paperwork requirements, such as the requirement of technology plans; requires electronic filing; and enables funding for direct connections between schools and libraries.

The Order also simplifies E-rate discount rate calculations by requiring applicants to apply a district-wide discount rate rather than calculate discounts on a per-school basis. This change could greatly impact large, diverse school districts. The Order also modifies the definition of urban and rural, addressing changes to the National School Lunch Program (NSLP) that have resulted in confusion for some applicants regarding discount rate calculations, and modifies the requirements for applicants using surveys to demonstrate their discount level. The Order also simplifies the invoice and disbursement process by allowing direct invoicing by schools and libraries, as opposed to only by the service provider, and adopting an invoicing deadline.

Additionally, the Order creates a Tribal consultation, training, and outreach program; requires the filing of all universal service appeals directly with USAC, which is expected to streamline the appeals process; and extends the document retention deadline to assist auditors and investigators.

Issues Presented in the Further Notice of Proposed Rulemaking

The Commission requests further public comment on a number of important items that will be the topic of future decisions, including:
• Long-term program funding necessary to meet the goals and funding targets established in the E-rate Modernization Order – the hotly debated topic of whether the funding cap should be increased.
• Whether multi-year contracts should be limited to five years with extensions, except for contracts that require large capital investments to install new facilities that are expected to have useful life for 20+ years.
• The manner of using National School Lunch Program data in calculating applicable discounts.
• Further steps to facilitate the use of cost-effective consortium-based purchasing including:
  o whether consortium discounts should be computed as a weighted average as opposed to a simple average of the members’ discounts,
  o if the consortium should be required to consider master contract pricing,
  o if the consortium should be required to receive an additional discount of 5% and if so, whether there should be a specific definition for the consortium in order to qualify for this additional discount, and
  o whether private sector parties should be permitted to join the consortium.
• Alternative methodologies for allocating support for Category 2 services instead of the per-student and per-square foot approach that the Commission will use in 2015 and 2016.

Comments on these issues are due September 15, 2014, with reply comments due September 30, 2014.

Next Steps

The E-rate Modernization Order is an important step in the transformation of the E-rate program – but it is only a first step. The Commission and USAC will soon begin the process of implementing the new rules in time for the 2015/2016 funding cycle that is scheduled to open in January 2015.

Some of these changes will immediately impact school and library budgets and, hence, the state and local funding sources that sustain them. For example, reductions in E-rate subsidies for voice services and equipment could significantly impact some E-rate applicants’ funding expectations as early as next year.

In addition, state and local policymakers will need to act swiftly to take full advantage of the $1 billion per year opportunity to upgrade on-campus school and library networks. To access this fund, school districts and library applicants will need to decide whether to invest the required match into those networks in time to take full advantage of this short term federal funding opportunity. Indeed, time is of the essence in this initiative; as discussed above, at this time, the Commission has only identified funding for this investment for the 2015/2016 and 2016/2017 school years. Applications for 2015 funds will be due sometime in late March 2015, and related funding will be available as early as July 1, 2015. In short, applicants have but a few months to prepare the necessary technology plans and application protocols to leverage this funding opportunity.

To meet this expedited process, the FCC and USAC will be adjusting application protocols to align with the new rules and will work with all stakeholders to provide clarity regarding these new rules and application protocols. USAC routinely conducts education and outreach to E-rate applicants and providers during the fall months; in conjunction with the FCC, those efforts will be expanded over the coming months. For further information regarding USAC’s E-rate outreach and education efforts, see http://www.usac.org/sl/about/outreach/default.aspx.

For more information about the E-rate modernization process, please contact Connected Nation at policy@connectednation.org.