I.

INTRODUCTION AND SUMMARY

The Telecommunications Industry Association ("TIA") \(^1\) files these comments in support of the Commission’s proposed goals for updating its E-rate program for schools and libraries, as discussed in the above-captioned notice of proposed rulemaking ("NPRM"). \(^2\)

Consistent with the policy of the Administration’s ConnectED initiative, \(^3\) now is the time to modernize E-rate, to make sure that America’s students and library users receive the benefits of a modern digital connected learning environment. \(^4\) The ConnectED initiative seeks to connect schools and libraries serving 99 percent of U.S. students to next-generation high-

---

1 TIA represents the global information and communications technology ("ICT") industry through standards development, advocacy, tradeshows, business opportunities, market intelligence and world-wide environmental regulatory analysis. Its hundreds of member companies manufacture or supply the products and services used in the provision of broadband and broadband-enabled applications. Since 1924, TIA has enhanced the business environment for broadband, mobile wireless, information technology, networks, cable, satellite and unified communications. TIA’s standards committees create consensus-based voluntary standards for numerous facets of the ICT industry.


4 See NPRM, 28 FCC Rcd at 11307-09, ¶¶ 7-8.
capacity broadband (with speeds of no less than 100 Mbps and a target speed of 1 Gbps) and to provide high-capacity wireless connectivity within those schools and libraries within five years.\(^5\)

TIA and its members in the information and communications technology industry recognize the importance of ensuring that schools and libraries have the tools needed to access the Internet at speeds that allow state-of-the-art learning through the use of advanced applications and content. The E-rate program is the Commission’s major tool for helping to connect these institutions to the Internet.

Therefore, TIA applauds the Commission’s issuance of the *NPRM*, which is the latest demonstration of the Commission’s consistent policy of reviewing and, where necessary, modernizing its universal service programs authorized by Section 254 of the Communications Act of 1934, as amended (the “Act”).\(^6\) TIA agrees with the three policy goals set out in the *NPRM*:

- Ensuring schools and libraries have affordable access to 21st Century broadband that supports digital learning;
- Maximizing the cost-effectiveness of E-rate funds; and
- Streamlining the administration of the E-rate program.\(^7\)

To make certain that schools and libraries can benefit from the dynamic technological developments associated with telecommunications generally and broadband specifically, the Commission should provide these institutions flexibility in the E-rate program to select the solutions they need, consistent with a general principle of technological neutrality. At the same

---


\(^6\) See 47 U.S.C §§ 254(b), (h).

\(^7\) See *NPRM*, 28 FCC Rcd at 11310, ¶ 12.
time, the Commission should provide incentives for these institutions to proceed efficiently in designing and implementing broadband connections for students and library users, while simplifying and increasing the transparency of the E-rate application process.

II. THE COMMISSION SHOULD ENSURE THAT SCHOOLS AND LIBRARIES HAVE AFFORDABLE ACCESS TO 21ST CENTURY BROADBAND THAT SUPPORTS DIGITAL LEARNING.

It is critical for the U.S. economy that schools and libraries have access to the broadband networks necessary to provide today’s digital connected learning applications to students, teachers, and library users. Consistent with the policy approach of the ConnectED initiative, an updated E-rate program can help these institutions harness private-sector initiative and innovation. If the Commission’s efforts are successful, schools and libraries will have economical access to networks that:

- Provide feature-rich educational devices for students. Such devices are increasingly price-competitive with basic textbooks;
- Expose students to global opportunities using new technology. These distance learning opportunities can improve foreign language skills and understanding of international issues;
- Provide support for digital educational content through the educational software market, which is a source of innovative teaching and learning techniques; and
- Restore U.S. leadership in educational achievement and competitiveness.

For schools and libraries to reap these benefits, such networks must be deployed in a forward-looking and cost-effective manner. Accordingly, the Commission should modify the E-rate program to encourage these institutions to design and deploy broadband networks that are state-of-the-art today and that can evolve to remain cutting-edge into the future.

---

8 See ConnectED Fact Sheet at 3-4.
9 See id.
10 See NPRM, 28 FCC Rcd at 11313, ¶¶ 17-18.
By providing schools and libraries with the flexibility to select the broadband solutions and connections that they need, the Commission can best use E-rate funds to promote deployment by schools and libraries of the state-of-the-art broadband networks discussed above. Through such flexibility, E-rate recipients should be able to design networks that include up-to-date versions of the broadband technologies used throughout the Internet today.

For example, TIA supports changes to the E-rate rules that recognize the importance of broadband connections and connectivity within schools and libraries (“internal connections”) and that provide incentives to deploy or upgrade such connections effectively. High-capacity internal connections are critical to linking classrooms and libraries to the modern Internet. Both wired and wireless solutions are possible solutions for upgrading schools’ and libraries’ internal connections. Observing the principle of technology neutrality in this regard will help ensure that E-rate recipients choose the most efficient technological solution to meet their internal connection needs.

Similarly, mobile broadband solutions will be of increasing importance as educators and students seek to work flexibly and in environments outside traditional school and library structures.

In addition, TIA believes that schools and libraries should be able to purchase or build wide area networks (“WANs”), in addition to leasing them, under the E-rate rules. The NPRM recognizes schools and libraries’ current extensive use of WANs, which for many school districts and library systems are necessities for a digital connected learning environment. The

---

11 See id. at 11328-39, ¶¶ 80-81.
12 Id. at 11328, ¶¶ 79-80.
Commission took such an approach in the Healthcare Connect Fund Order,\(^{13}\) which could serve as a guide to similar rules for the E-rate program.

Modern forms of internal connections, mobile broadband, and WANs are current examples of connective technologies that undoubtedly will evolve in the future. Flexibility in technological choice for schools and libraries will allow them to participate in and benefit from the development of a modern broadband network that operates seamlessly.\(^{14}\)

## III. THE COMMISSION SHOULD MAXIMIZE THE COST-EFFECTIVENESS OF THE E-RATE PROGRAM

Along with increased flexibility for technological choice, E-rate policies should provide incentives for schools and libraries to make efficient, sound investments in telecommunications and broadband technologies. TIA supports the NPRM’s emphasis on modifying the current rules to improve these incentives.

In particular, TIA acknowledges the Commission’s approach of proposing several alternatives for increasing the cost effectiveness of the program, including modifying the discount matrix, basing support on district-wide eligibility and applications by school districts, more equitable funding for rural institutions, setting budgets or limits, more equitable funding for broadband internal connections, and simplifying allocation of E-rate funds.\(^{15}\) The Commission correctly notes that these alternatives are not mutually exclusive.\(^{16}\)

**An Efficient Matching Requirement:** A way to improve cost effectiveness that the Commission could adopt for several of these alternatives is to set a meaningful matching


\(^{14}\) See NPRM, 28 FCC Rcd at 11310, ¶ 18.

\(^{15}\) See id. at 11337-48, ¶¶ 117-156.

\(^{16}\) See id. at 11337, ¶ 116.
requirement for participating schools and libraries.\textsuperscript{17} Matching is a time-tested means of motivating program applicants to better define their investment priorities. For example, if the Commission retains the present approach based on a discount matrix for eligible participants, the \textit{NPRM} makes a strong case that increasing the matching requirement will improve efficiency and accountability.\textsuperscript{18}

Similarly, if the Commission revises its rules for deriving the discount matrix on a school district-wide basis,\textsuperscript{19} changing the matrix to reflect a reasonable matching requirement will help ensure that the applications are made on a sound economic basis. If the Commission decides to set budgets or limits for funding,\textsuperscript{20} matching can and should be an integral part of any such reform. If necessary, the Commission should phase in any increase to avoid surprise to program participants.\textsuperscript{21}

\textbf{Amortization:} The Commission should emphasize efficient capital investments by requiring reasonable amortization periods. As the \textit{NPRM} explains, although the E-rate program currently provides support for some installation and special construction charges, it requires the

\begin{itemize}
\item \textsuperscript{17} See \textit{id.} at 11338, \parens{119-121, 11347, 156.}
\item \textsuperscript{18} See \textit{id.} at 11338, \parens{119 \& n.171 (citing USAC, Recommendations of the Task Force on the Prevention of Waste, Fraud and Abuse, at 3-4 (Sept. 22, 2003) (submitted with letter from Cheryl Parrino, USAC, to Marlene Dortch, Secretary, FCC (filed Nov. 26, 2003)); New York State Dept. Of Education Comments in CC Docket No. 02-6 at 8-9 (filed July 9, 2010); Funds for Learning Comments in CC Docket No. 02-6 at 6-9 (filed July 9, 2010); E-Rate Central Reply Comments in CC Docket No. 02-6 at 7 (filed July 24, 2010); E-Rate Management Professionals Assoc. Comments in CC Docket No. 02-6 at 18 (filed July 8, 2010); Kellogg & Sovereign Comments in CC Docket No. 02-6 at 19-23 (filed July 9, 2012)).}
\item \textsuperscript{19} See \textit{NPRM}, 28 FCC Rcd at 11339-41, \parens{126-129.}
\item \textsuperscript{20} See \textit{id.} at 11342-43, \parens{135-138.}
\item \textsuperscript{21} See \textit{id.} at 11339, \parens{123.}
\end{itemize}
cost of large projects to be spread over three years or more.\textsuperscript{22} Although the Commission’s intent in requiring the cost to be spread over multiple years has been to reduce the demand on the E-rate fund, TIA believes that this policy may have the unintended consequence of deterring efficient investments, including the deployment of fiber and related equipment. The Commission should consider modifying amortization periods to encourage investment.

**Consolidated Menu:** The Commission’s current “priority one/priority two” funding system should be replaced by a consolidated menu of services.\textsuperscript{23} Under the present system, telecommunications and Internet access are “priority one” services, while internal connections are “priority two” services.\textsuperscript{24}

This prioritization scheme may have helped the Commission meet its initial goals of improving telecommunications and Internet connectivity for schools and libraries when the E-rate program was beginning. However, because modernizing internal connections is so important to meeting the challenge of upgrading schools’ and libraries’ broadband access, the Commission should eliminate the priority one/priority two distinctions.

\textsuperscript{22} See id. at 11326, ¶ 73. Under current Commission rules, up-front non-recurring charges need to be amortized where they vastly exceed the monthly recurring charges. See Request for Review by Brooklyn Public Library, Federal-State Joint Board on Universal Service, Changes to the Board of Directors of the National Exchange Carrier Association, Inc., Order, 15 FCC Rcd 18598, 18606-07, ¶ 20 (2000) (“Brooklyn Order”). Based on the Brooklyn Order, the Universal Service Administrative Company (“USAC”) currently requires that upfront or non-recurring charges of $500,000 or more must be prorated evenly over a period of at least three years. See USAC, Schools and Libraries, Wide Area Networks, Capital Investment Costs, available at http://www.usac.org/sl/applicants/beforeyoubegin/eligible-services/wan.aspx (last visited Sept. 5, 2013).

\textsuperscript{23} See NPRM, 28 FCC Rcd at 11345, ¶ 147.

\textsuperscript{24} See Federal-State Joint Board on Universal Service, Fifth Order on Reconsideration and Fourth Report and Order, 13 FCC Rcd 14915, 14938, ¶ 36 (1998); see also 47 C.F.R. § 54.507(g).
By giving all eligible services equal priority, the Commission will be able to implement a “whole networks” approach, under which connectivity to schools and internal connections are funded together. This approach will encourage more cohesive network design, which, in turn, will eliminate uneconomic investment incentives and permit E-rate applicants to make better use of available funding. This approach would give schools the flexibility to focus E-rate funding on those portions of their network where upgrades are most needed, whether connection to the schools or internal connections.

IV. STREAMLINING THE ADMINISTRATION OF THE E-RATE PROGRAM WILL BENEFIT SCHOOLS AND LIBRARIES.

Simplifying the application process and the guidance provided by the Commission on eligible services will help schools and libraries to proceed with much-needed broadband modernization and expansion. As a general matter, the Commission also should increase program transparency, in order to enhance the accountability of program participants and administrators and decrease the potential for fraud, waste and abuse of the program.

To enable USAC to manage applications more quickly and efficiently, basic updates of program procedures should be implemented as quickly as possible. In many cases, simplifying the process means updating it to take advantage of modern means of filing and managing documents. For example, TIA agrees that all E-rate applicants and service providers should file all documents with USAC electronically and USAC should make all notifications electronically. Such automated management will simplify the application process for all

---

25 See NPRM, 28 FCC Rcd at 11345, ¶¶ 146-147.
26 See id. at 11362-63, ¶¶ 224-26.
27 See id. at 11355-57, ¶¶ 191-201, 11365, ¶ 232.
28 See id. at 11363-64, ¶¶ 227-228.
parties and, if properly executed, will increase the transparency of the process, with the opportunity for improved auditing and accountability.

Moreover, the Commission should simplify the Eligible Services List (“ESL”) to remove the regulatory classifications of telecommunications services and Internet access to allow applicants to seek eligible services from entities regardless of their regulatory labels. 29 This is consistent with the Healthcare Connect Fund Order, in which the Commission determined that it should support broadband Internet access services and also high-capacity transmission services offered on a common carrier and a non-common carrier basis to allow applicants to choose from a wide range of connectivity solutions using any technology from any provider. 30

When the ESL was first issued for 1998, it was a notable example of simplifying and increasing the transparency of the application process. 31 The proposed changes will help the ESL evolve for the 21st Century.

29 See id. at 11369-70, ¶¶ 248-250.
30 See id. at 11370, ¶ 250 (citing Healthcare Connect Fund Order, 27 FCC Rcd at 16729-30, ¶ 111).
V. CONCLUSION

For the foregoing reasons, TIA urges the Commission to act consistently with the recommendations above. Increased technological flexibility for E-rate program participants, coupled with greater incentives for efficient, economical investment decisions, will help schools and libraries realize the benefits of advanced broadband connectivity for students and library users throughout the United States.

Respectfully submitted,

TELECOMMUNICATIONS INDUSTRY ASSOCIATION

By: /s/ Danielle Coffey

Danielle Coffey
Vice President, Government Affairs

Mark Uncapher
Director, Regulatory and Government Affairs

TELECOMMUNICATIONS INDUSTRY ASSOCIATION
10 G Street N.E.
Suite 550
Washington, D.C. 20002
(202) 346-3240

September 16, 2013

Its Attorneys