

Before the Federal Communications Commission
Washington DC 20554

In the Matter of)
Modernizing the E-Rate Program for Schools) WC Docket No. 13-184
and Libraries)
Notice of Proposed Rulemaking)

Comments of the International Society for Technology in Education (ISTE®)

I. Introduction

The International Society for Technology in Education (ISTE®) is the premier organization for educators and education leaders committed to empowering connected learners in a connected world. As the creator and steward of the definitive education technology standards, ISTE’s mission is to empower learners to flourish in a connected world by cultivating a passionate professional learning community, linking educators and partners, leveraging knowledge and expertise, advocating for strategic policies and continually improving learning and teaching. ISTE represents more than 100,000 education leaders around the world, including nearly 19,000 individual members, 79 affiliate organizations and 60 corporations worldwide. ISTE members encompass the entire education spectrum including teachers, media specialists, technology directors, principals, superintendents, college faculty and more. Ultimately, the vision of ISTE is a world where all learners thrive, achieve and contribute.¹

ISTE has been at the forefront of advocacy in support of the E-Rate program for many years, both individually and as a member of the Education and Libraries Networks Coalition (EdLiNC). At ISTE’s annual conference in June 2013, where approximately 20,000 ed tech educators and leaders participated, E-Rate was front and center. Commissioner Jessica Rosenworcel led a

¹ For more information about ISTE, see <https://www.iste.org/about-iste>; <http://www.iste.org/istereveal>.

special concurrent session where she outlined her vision for E-Rate 2.0 and participated in the final keynote session of the conference. Additionally, during the conference, more than 1,700 educators made their voices heard by signing a petition, which was later delivered to all three FCC Commissioners, in support of the ConnectEd Initiative and an increased investment in the E-Rate program. In a statement accompanying the petition, ISTE CEO Brian Lewis echoed the calls of those 1,700 educators:

Today, demand for E-Rate funding is more than double the amount of available funds, and ISTE believes this nation must double down on its investment in E-Rate. Reinvesting in and updating the E-Rate program will ensure that students across the country have access to the high-speed connectivity necessary to make effective use of high-quality classroom learning technologies. We urge the Commissioners to consider increased investment in E-Rate to ensure another 15 years of success.²

ISTE applauds and thanks the FCC for undertaking this E-Rate proceeding at such a critical time for the program and for the future of education in our nation. Today's learning environments require fast and reliable school broadband networks. Student collaboration and communication, blended and online learning, online assessments, data-driven decision making and parental communication are just a few of the ways educators, students and parents rely on school broadband networks. However, in far too many cases, school networks are not able to meet these demands, and schools that are able to keep up today are unsure how they will keep up with future demands. The effective implementation of digital learning is vital if students are to meet the Common Core State Standards and graduate from high school college and career ready. In these comments on the Commission's most recent Notice of Proposed Rulemaking (*Notice*),³ we would like to make the following key points:

1. ISTE believes that the E-Rate program is extremely successful;
2. ISTE believes that E-Rate's funding levels have not kept pace with demand and urges an increase to at least \$5 billion annually;

² Press Release, International Society for Technology in Education, ISTE Members Petition FCC to Support President Obama's ConnectEd Initiative and Reinvest in E-Rate (July 11, 2013), *available at* <https://www.iste.org/news/news-details/2013/07/11/iste-members-petition-fcc-to-support-president-obama-s-connected-initiative-and-reinvest-in-E-Rate>.

³ *Modernizing the E-Rate Program for Schools and Libraries*, WC Docket 13-184, Notice of Proposed Rulemaking (2013) (*Notice*).

3. ISTE supports the establishment of national bandwidth goals and entity appropriate targets for the E-Rate program;
4. ISTE supports focusing the E-Rate program on broadband connectivity and recommends moving wireless LAN controllers and wireless access points to Priority I.
5. ISTE supports increasing discounts for rural schools and libraries for Priority I and Priority II to ensure attainment of broadband goals.

II. ISTE Believes that the E-Rate Program is Extremely Successful.

ISTE agrees wholeheartedly with the comments filed by EdLiNC and others that E-Rate has been an incredibly successful program since its inception in 1998.⁴ There is no doubt that the E-Rate program has been instrumental in ensuring that nearly every classroom and library has basic internet connectivity and facilitating access to digital tools, online and blended learning, new methods of communication and collaboration and more. Our members agree. In response to our request that they weigh in on this rulemaking, close to 600 educators submitted comments that detail E-Rate's central role in helping schools around the country implement their digital learning vision at the local level. Several stories merit highlighting:

- According to Doug Vander Linden from Burlington USD 244 in Burlington, Kansas: "E-Rate funds have been crucial to the success of our technology programs and our County-Area Community Network. We are able to provide a 50MB Internet Pipe for the 1,500 students that we serve countywide in 3 school districts. This also serves 9,000 Library Patrons in 6 Public Libraries countywide. Without E-Rate funds, we would only be able to afford a 25 to 30 MB connection. This would in no way support the needs we have today. Plus, with the increased level of services that will be going to [the] web including College and Career Readiness assessments and instructional resources, we will need to grow this pipe to 150 MB by 2015. This will NOT be feasible in Rural America without continued, and hopefully expanded, E-Rate Services."⁵

⁴ Comments of EdLiNC on the Matter of Modernizing the E-Rate Program for Schools and Libraries at 3–6 (filed Sept. 16, 2013), *available at* <http://apps.fcc.gov/ecfs/document/view?id=7520943930>.

⁵ Comments of Doug Vander Linden on the Matter of Modernizing the E-Rate Program for Schools and Libraries (filed Sept. 18, 2013), *available at* <http://apps.fcc.gov/ecfs/document/view?id=7520944447>.

- Bob Cook, an Instructional Technology Facilitator for Coats Erwin Middle School in rural Dunn, North Carolina, explained: “E-Rate has been very important to Harnett County Schools. It [is] especially important to Coats Erwin Middle School as it has helped our students and teachers gain access to a wealth of online resources, communicate and collaborate, and develop the 21st century skills necessary for college and career. This is a life line for rural schools to give our students a global perspective.”⁶
- David Crouse, the technology director of Roanoke City Schools in Virginia, wrote: “I have seen our Internet needs go from ‘I hope I have dial-up’ to 200 mbps. Our district is now 1 to 1 in every grade. All of our campuses are managed wireless with our 1700 laptops on the system. We do not have textbooks; we have internet delivered content and programs. We would not be able to teach and our students would not have access to the web without the internet access provided by E-Rate.”⁷
- Jean Zivkovich from Minneapolis, Minn., observed: “Our school serves a low-income, English learning population. E-Rate helps us to give them a technology experience that they would not have at home. It also helps us to help them not be part of the technology have-nots.”⁸
- ISTE Board Member Betsy Goeltz, the principal at Ellis Elementary in Pocatello, Idaho, said, “I know that seamlessly infusing digital learning throughout the curriculum is a prerequisite for students to graduate from high school with the skills and knowledge they need to succeed in today’s global economy. Access to high-speed broadband is the key to allowing modern teaching and learning to occur in all schools across the country.”⁹

III. ISTE Believes that E-Rate’s Funding Levels Have Not Kept Pace with Demand and Urges an Increase to at Least \$5 Billion Annually.

⁶ Comments of Bob Cook on the Matter of Modernizing the E-Rate Program for Schools and Libraries (filed Nov. 4, 2013), *available at* <http://apps.fcc.gov/ecfs/document/view?id=7520955623>.

⁷ Comments of David Crouse on the Matter of Modernizing the E-Rate Program for Schools and Libraries (filed Oct. 21, 2013), *available at* <http://apps.fcc.gov/ecfs/document/view?id=7520948610>.

⁸ Comments of Jean Zivkovich on the Matter of Modernizing the E-Rate Program for Schools and Libraries (filed Sept. 20, 2013), *available at* <http://apps.fcc.gov/ecfs/document/view?id=7520944877>.

⁹ Comments of Betsy Goeltz on the Matter of Modernizing the E-Rate Program for Schools and Libraries (filed Nov. 6, 2013), *available at* <http://apps.fcc.gov/ecfs/document/view?id=7520956424>.

Paragraphs 172–176 of the *Notice* raise the issue of E-Rate funding and ask whether the Commission should look to reprioritize current funds, authorize a temporary increase to the E-Rate cap, or authorize a permanent cap raise.¹⁰ ISTE agrees vigorously with EdLiNC’s argument that E-Rate’s funding levels have not kept pace with demand and request that the Commission permanently increase the E-Rate funding level to at least \$5 billion annually, so that the program can meet the growing demands of Priority I services and allow significantly more schools to access crucial internal connections services.¹¹ A temporary increase in funding is simply insufficient to meet the growing demand for and increasing use of digital devices; digital and online tools and resources; online formative and summative assessments to personalize learning; and digital age skills such as creativity, collaboration and critical thinking. ISTE believes that EdLiNC’s bottom-line arguments for increasing E-Rate support are compelling and accurate:

- Without an increase in the program’s annual cap, the gap between what the program can provide and what schools and libraries need will only widen.
- Without an increase in funding, the low income and rural and remote schools and libraries that are most in need and which E-Rate’s founders and this Commission made priorities, will be confined to support for increasingly limited Priority I services and will most assuredly lose ground to their better heeled counterparts.
- Without an increase in funding, efforts to advance digital learning – be they 1:1 initiatives, BYOD programs, digital textbooks or online assessments – will be undermined, if not torpedoed.¹²

ISTE notes that the initial filings in this proceeding revealed a groundswell of support for a permanent increase to the E-Rate funding level, including the Alliance for Excellent Education, the State E-Rate Coordinators Alliance (SECA), Funds for Learning, State Education Technology Directors Association (SETDA), Schools, Health & Libraries Broadband Coalition (SHLB) and the Council of Great City Schools.¹³ Most importantly, hundreds of comments from

¹⁰ *Notice* at paras. 172–176.

¹¹ Comments of EdLiNC at 15–16 (advocating for permanent cap increase to at least \$5 billion).

¹² *Id.* at 15.

¹³ Comments of the Alliance for Excellent Education on the Matter of Modernizing the E-Rate Program for Schools and Libraries at 8 (filed Sept. 16, 2013), *available at* <http://apps.fcc.gov/ecfs/document/view?id=7520943813> (urging increase in the cap); Comments of

the field — from state and county departments of education, districts, superintendents, principals, technology coordinators/directors, teachers, library media specialists and more—hailing from 45 states — described rising bandwidth needs and advocated for an increase to the E-Rate cap, with many specifically calling for an increase to at least \$5 billion annually. The list of school districts and professional associations that support raising the cap to at least \$5 billion include Houston ISD, Kansas City Public Schools (Kansas City Missouri), Sitka School District (Sitka, Alaska), Los Angeles Unified, Ann Arbor Public Schools, Vermillion School District No. 12-1 in South Dakota, Pennsylvania Association of School Administrators, Knox County Schools (Knoxville, Tennessee) and many more.¹⁴

Council of Great City Schools on the Matter of Modernizing the E-Rate Program for Schools and Libraries at 3 (filed Sept. 16, 2013), *available at* <http://apps.fcc.gov/ecfs/document/view?id=7520943836> (arguing that an immediate increase in the funding cap is needed); Comments of Funds for Learning on the Matter of Modernizing the E-Rate Program for Schools and Libraries at 5 (filed Sept. 16, 2013), *available at* <http://apps.fcc.gov/ecfs/document/view?id=7520944155> (arguing that the annual cap is going to have to be at least double what it is today); Comments of the State E-Rate Coordinators Alliance (SECA) on the Matter of Modernizing the E-Rate Program for Schools and Libraries at 9 (filed Sept. 16, 2013), *available at* <http://apps.fcc.gov/ecfs/document/view?id=7520944060> (advocating for permanent and sustainable additional funding regarding the cap); State Education Technology Directors Association (SEDTA) on the Matter of Modernizing the E-Rate Program for Schools and Libraries at 22 (filed Sept. 16, 2013), *available at* <http://apps.fcc.gov/ecfs/document/view?id=7520944050> (arguing that a modernized E-Rate will need increased funding); Schools, Health & Libraries Broadband Coalition (SHLB) on the Matter of Modernizing the E-Rate Program for Schools and Libraries at 3–4 (filed Sept. 16, 2013), *available at* <http://apps.fcc.gov/ecfs/document/view?id=7520944111> (advocating that the FCC should permanently raise the cap).

¹⁴ Comments of Houston ISD on the Matter of Modernizing the E-Rate Program for Schools and Libraries at 1 (filed Sept. 13, 2013), *available at* <http://apps.fcc.gov/ecfs/document/view?id=7520943434>; Comments of Shana Long (Kansas City Public Schools) on the Matter of Modernizing the E-Rate Program for Schools and Libraries at 1 (filed Sept. 16, 2013), *available at* <http://apps.fcc.gov/ecfs/document/view?id=7520943963>; Comments of Steve Bradshaw (Sitka Public Schools) on the Matter of Modernizing the E-Rate Program for Schools and Libraries at 1 (filed Sept. 16, 2013), *available at* <http://apps.fcc.gov/ecfs/document/view?id=7520943853>; Comments of Los Angeles Unified School District on the Matter of Modernizing the E-Rate Program for Schools and Libraries at 6 (filed Sept. 13, 2013), *available at* <http://apps.fcc.gov/ecfs/document/view?id=7520943375>; Comments of Peter Pasque (Ann Arbor Public Schools) on the Matter of Modernizing the E-Rate Program for Schools and Libraries (filed Sept. 18, 2013), *available at* <http://apps.fcc.gov/ecfs/comment/view?id=6017467851>; Comments of Mark Froke (Vermillion School District) on the Matter of Modernizing the E-Rate Program for Schools and Libraries (filed Sept. 16, 2013), *available at* <http://apps.fcc.gov/ecfs/document/view?id=7520944119>; Comments of Jim Buckheit on the Matter of Modernizing the E-Rate Program for Schools and Libraries at 1 (filed Aug. 30, 2013), *available at* <http://apps.fcc.gov/ecfs/document/view?id=7520940441>; Comments of Knox County Schools on the Matter of Modernizing the E-Rate Program for Schools and Libraries at 4 (filed Sept. 16, 2013), *available at* <http://apps.fcc.gov/ecfs/document/view?id=7520943928>.

Some in the field described E-Rate as a program that has made significant strides in supporting digital learning, but that needs increased funding to reach all students:

- Lisa Rae and James Edman, from the South Dakota Department of Education and the South Dakota Bureau of Information & Telecommunications respectively, argue that South Dakota applicants need additional funding to obtain the network equipment needed to support 21st century learning. They state that “if the FCC decides to raise the funding cap ... a one-time increase will not enable there to be sufficient funding over the long term. ... If a technology platform is outdated and cannot support new applications, 21st century learning will certainly be impeded.”¹⁵
- Stanley Freeda from the New Hampshire Department of Education Office of Educational Technology wrote that “while there are many examples of digital learning that currently take place in New Hampshire, there are many more examples of schools and districts where digital learning does not take place. The main reason for this is cost and accessibility.” Mr. Freeda then urged “the FCC to increase funding for the E-Rate program to at least \$5 billion.”¹⁶
- Nancye Blair Black of Polk County, Florida, outlined that “students in my own classes were able to use technology to make significant learning gains, collaborate with students around the world, and create award-winning multimedia. In fact, one of my students used technology resources to write and publish a short novel that became an Amazon best seller. While my students had access to these opportunities to learn and succeed, students and teachers at other schools were not able to engage in the same powerful learning activities due to network limitations. The need for a reliable high-speed network is real now and is only going to increase in the near future. . . . I respectfully urge the FCC to increase funding for the E-Rate program to at least \$5 billion to meet this demand.”¹⁷

¹⁵ Comments of the South Dakota Department of Education and the South Dakota Bureau of Information and Telecommunications Technology on the Matter of Modernizing the E-Rate Program for Schools and Libraries at 21 (filed Sept. 16, 2013), *available at* <http://apps.fcc.gov/ecfs/document/view?id=7520944031>.

¹⁶ Comments of New Hampshire Department of Education Office of Educational Technology on the Matter of Modernizing the E-Rate Program for Schools and Libraries at 1 (filed Sept. 16, 2013), *available at* <http://apps.fcc.gov/ecfs/document/view?id=7520943685>.

¹⁷ Comments of Nancye Blair Black on the Matter of Modernizing the E-Rate Program for Schools and Libraries (filed Sept. 20, 2013), *available at* <http://apps.fcc.gov/ecfs/document/view?id=7520944886>.

Many E-Rate recipients explained in their initial Comments that E-Rate has been foundational in building network capacity to support digital learning, but that more bandwidth is needed to support the increasing use of digital devices, digital and online resources, online assessments, and other locally based innovations.

- Heath Grimes, superintendent of Lawrence County Schools in Moulton, Alabama, explained that “E-Rate has been very important to Lawrence County Schools in Alabama because it has helped our students and teachers gain access to a wealth of online resources, communicate and collaborate, and develop the 21st century skills necessary for college and career. However, E-Rate funding levels have not kept pace with Lawrence County Schools’ current bandwidth needs. Without E-Rate we would not be able to fund the bandwidth we now have. We desperately need more E-Rate funding to increase bandwidth to a level that will assure adequate access to networked and internet resources. I urge you to raise the E-Rate funding level to at least \$5 billion per year, which is close to the average demand level for each of the past two years.”¹⁸
- Nancy Tom, a teacher from Harlandale ISD in San Antonio, Texas, explained that “most of my students do not have a computer much less the Internet at home. Most only have access at school. I use digital learning to meet Common Core State Standards, administer online assessments, and make data-driven decisions After school, I take the time to assist students with career opportunities, and online applications. However, Harlandale does not have the funds to keep up with demand, and the need for a reliable high-speed network is only going to increase in the near future. We do the best that we can, but we are always at least 3 years behind technology. I urge you to raise the E-Rate funding level to at least \$5 billion per year, which is close to the average demand level for each of the past two years. Harlandale depends on E-Rate and could not function without [it].”¹⁹

IV. ISTE Supports the Establishment of National Bandwidth Goals and Entity Appropriate Targets for the E-Rate Program.

¹⁸ Comments of Heath Grimes on the Matter of Modernizing the E-Rate Program for Schools and Libraries (filed Sept. 16, 2013), *available at* <http://apps.fcc.gov/ecfs/document/view?id=7520943467>.

¹⁹ Comments of Nancy Tom on the Matter of Modernizing the E-Rate Program for Schools and Libraries (filed Sept. 12, 2013), *available at* <http://apps.fcc.gov/ecfs/document/view?id=7520943076>.

Paragraphs 13–40 of the *Notice* ask whether the FCC should establish new goals and measurements for the E-Rate program, including the possibility of “benchmarking the performance of schools’ and libraries’ broadband connections against specific speed targets.”²⁰ Specifically, paragraphs 22–24 seek comment on the goals advanced both by President Obama and Commissioner Rosenworcel — echoing targets established by the State Educational Technology Directors Association — which would initially aim to have schools reach the bandwidth target of 100 Mbps per 1000 students and ultimately 1 Gbps per thousand students.²¹

ISTE wholeheartedly agrees that the FCC must move from measuring the existence of an Internet connection to measuring the strength of that connection. The future of digital learning in our nation’s classrooms will depend not just on having an internet connection, but on having access to high-speed broadband that facilitates the use of a wide array of digital resources and tools, online learning, video streaming, collaboration mechanisms, online assessments, personalized learning and more. Therefore, ISTE seconds the comments of EdLiNC that expressed support for these national bandwidth focused goals for the E-Rate program. Additionally, ISTE concurs that any goals set by the Commission should include scalable, entity-specific goals that take into account the differing needs, geographic circumstances, and costs of each particular school and library applicant. We also believe that any goals set by the Commission must in no way function as mandates that would penalize schools and libraries that fail to meet bandwidth targets or timelines. Further, these targets should not operate as ceilings, limiting the amount of bandwidth that schools and libraries can acquire. Lastly, ISTE believes that the FCC should use data collected from applicants — likely through the application forms — to inform these goals and establish baseline bandwidth levels.²²

V. ISTE Supports focusing the E-Rate program on Broadband Connectivity and Recommends Moving Wireless LAN Controllers and Wireless Access Points to Priority I.

Paragraph 65 of the *Notice* seeks comment on potential updates to the Eligible Services List and its related rules in order to focus funding services on supporting broadband both to and within

²⁰ *Notice* at paras. 13–40.

²¹ *Id.* at paras. 22–24.

²² Comments of EdLiNC at 16–19.

schools and libraries.²³ Specifically, paragraphs 83–85 seek comment on how the Commission can better support connectivity within schools and libraries since many E-Rate applicants have seen no or very little funding for internal connections for many years.²⁴

ISTE notes that many schools are continuing to implement bring-your-own-device (BYOD) programs, 1:1 technology initiatives and other digital learning programs that are increasing the number of devices attempting to connect to a school’s network at any given time. Additionally, research suggests that students increasingly expect to be able to use technology and devices in every aspect of their learning experience. Project Tomorrow’s Speak Up 2012 online nationwide survey of more than 364,000 students showed that 64% of middle school students wish to access online textbooks and 73% want the ability to look up information on the Internet whenever they have the need.²⁵ Educators are also clamoring to include more technology in the classroom. A recent survey by Common Sense Media shows that 92% of teachers would like to use more ed tech in the classroom than they do now.²⁶ According to Selena Ward, an ISTE blogger and an instructional lead teacher for arts integration at Northwestern High School in Hyattsville, Maryland, who is already leading the way in the use of education technology, her school has depended on E-Rate support to upgrade their wireless network in order to support a wide array of digital teaching and learning activities. At her school, “administrators, teachers and students are all using iPads for productivity and learning. All administrators complete observations, send immediate feedback to teachers and use the data to guide instructional goals. Teachers present, assess and connect with other educators. Students share movies from biology labs, have in-depth discussions through Edmodo and explore QR codes in the media center. . . . In just a couple of months, the transformation has been substantial, and it wouldn’t have happened without E-Rate funds.”²⁷

²³ *Notice* at para. 65.

²⁴ *Id.* at paras. 83–85.

²⁵ Project Tomorrow Speak Up, *From Chalkboards to Tablets: The Emergence of the K-12 Digital Learner*, at 10 (rel. June 2013), *available at* <http://www.tomorrow.org/speakup/pdfs/SU12-Students.pdf> (last visited Sept. 12, 2013).

²⁶ Common Sense Media, *Ed Tech: It Isn’t Optional, It’s Essential*, *available at* <http://www.graphite.org/edtech-infographic#.UfLzyY1OR6M> (last visited Nov. 6, 2013).

²⁷ Selena Ward, *A Tale of One School Powered by E-Rate*, ISTE CONNECTS BLOG (Oct. 2, 2013), <http://blog.iste.org/tale-school-powered-E-Rate/>.

While ISTE agrees that all aspects of a network — both the internet connection to the building and the internal network within a building — are important, wireless LAN controllers and wireless access points are becoming increasingly critical to ensuring that the increasing number of devices in schools can connect to high-speed internet access. Indeed, many of the case studies in Cisco’s recent white paper indicate that expanding the number of wireless access points is a critical aspect of launching new technology initiatives. For example, when Katy ISD in Katy, Texas, rolled out their new BYOD model, they installed new wireless access points throughout the district.²⁸ When Farmington Public Schools in Farmington, Michigan, decided to expand the use of digital devices into the classroom through BYOD, they deployed additional wireless access points to increase the reach of their network.²⁹

Based on this evidence, ISTE recommends that wireless controllers and wireless access points be moved from Priority II to Priority I support eligibility so that more schools can take advantage of the opportunity to support their digital learning initiatives and create first-class 21st century classrooms.

VI. ISTE Supports Increasing Discounts for Rural Schools and Libraries for Priority I and Priority II to Ensure Attainment of Broadband Goals

Paragraph 133 of the *Notice* seeks comment on enhancing support for rural applicants.

Specifically, the *Notice* states:

In order to ensure more equitable access to E-Rate funding, we seek comment on whether we should further increase the discount rate or the amount of E-Rate funds available for schools and libraries in rural areas or in remote rural areas. When the Commission created the E-Rate program, it recognized that schools and libraries in rural areas would likely face higher costs for E-Rate supported services, and therefore provided an additional 5-10 percent discount rate for rural schools and libraries that would otherwise receive a discount rate of 60 percent or less. E-Rate has been crucial in supporting connectivity to rural schools and libraries. However, those schools and libraries in rural areas that also have a high percentage of students that qualify for free or reduced-price school lunches do not get an additional discount, even though their costs may be higher. We therefore seek comment on whether all rural schools and libraries, or those in remote-

²⁸ Cisco, HIGH-SPEED BROADBAND IN EVERY CLASSROOM: THE PROMISE OF A MODERNIZED E-RATE PROGRAM 13 (Sept. 2013), *available at* http://www.cisco.com/web/strategy/docs/education/e_rate_connected_wp.pdf.

²⁹ *Id.* at 14.

rural areas should receive additional E-Rate support to recognize the unique challenges of providing services in rural, less dense areas.³⁰

A number of filings make the case that E-Rate is of special importance to schools and libraries in rural, high-cost areas and that increased funding is vital for them to provide necessary educational services. For example, the superintendent of Putnam County R-I Schools in northern Missouri, states in his comments:

Education funding in Missouri has been 8-10% below full funding for five years, and we are struggling financially to provide a quality education for our students. E-Rate assistance is essential to our budget. We are also part of a four-school consortium that uses a distance learning network to provide educational services to the four schools. All four schools are small and rural and are not able to provide all curriculum requirements. For example, Green City Schools has a certified physics teacher; she provides physics to all four schools. Putnam County has a Spanish teacher and she provides Spanish to all the schools as well. The interactive system is built on a fiber optic network and the large fees are paid in part with E-Rate funding each year. For our school, E-Rate is a successful program that we continue to rely on and a program that must continue to provide funding critical for telecommunications and connectivity. Changes in the E-Rate program could easily cause the distance learning network to disband, as each school in the consortium is facing continued cuts of state funding. Each school's students would then lose educational opportunities which are important to their future success.³¹

A technology director from Alaska's Iditarod Area School District also makes a strong case for the value of broadband investments in remote locations:

E-Rate funding levels have not kept pace with my district's current bandwidth needs! I urge you to raise the E-Rate funding level in rural areas to provide our students a level playing field with the rest of America's students. Internet is MUCH, MUCH more expensive in our rural areas that go through satellite to the extent that we can only afford to get 3 or 4 MB of download speed and 1.5 to 2 MB of upload speed. 90% of Americans have 5-10 times higher that than in their own homes, but our Alaskan students can't even get 10 MB at their rural schools, and our 90% number is how many of them do NOT have internet at home, so their only hope is to have decent internet at school! ... Without increased bandwidth we will not be able to join the online initiatives for state mandated testing coming to Alaska... Our teachers are having to plan who can do what just to get

³⁰ Notice at para 133.

³¹ Comments of Heath Halley in the Matter of Modernizing the E-Rate Program for Schools and Libraries at 15 (filed September 16, 2013), *available at* <http://apps.fcc.gov/ecfs/document/view?id=7520942716>.

available bandwidth out of our meager 3-4 MB just to try to use the tools teachers in the lower 48 take for granted, and the need for a reliable high-speed network is only going to increase in the near future.³²

Some commenters make a strong case that most rural areas cannot access internal connections and basic maintenance support because their discount rates fail to meet the cutoff, year in and year out, for Priority II funding. The South Dakota Department of Education and South Dakota Bureau of Information and Telecommunications made that problem quite clear in their initial comments to the Notice, saying: “Most South Dakota applicants have been unable to obtain Priority 2 funds because their building discounts are not high enough and the fund routinely falls short of being able to fund any Priority 2 requests below 90%. In fact most applicants do not bother applying anymore and are extremely frustrated over the lack of fairness they perceive.”³³ The Kansas Department of Education also noted this problem and suggested a solution: “rural/remote rural should receive a higher discount.”³⁴

ISTE agrees that rural schools and libraries require more assistance to reach adequate levels of broadband connectivity and that the current discount matrix configuration, which provides an additional discount of 10% to those rural entities eligible for between 40% and 60% discounts, is plainly inadequate to ensure that they can obtain the Priority II support so critical to making use of bandwidth. Therefore, we propose that all rural applicants receive an additional 5% increase on top of their current eligibility to provide them with more savings as well as a better opportunity to gain access to Priority II services. We propose further that the increase occur in both priorities as telecommunications and internet access costs and the ability of rural applicants to afford those costs remains an issue. Finally, we note that it would be unfair for this discount increase to provide discounts in excess of the highest eligible discount level, which stands

³² Comments of Pam Grieve in the Matter of Modernizing the E-Rate Program for Schools and Libraries (filed November 6, 2013), *available at* <http://apps.fcc.gov/ecfs/document/view?id=7520956534>

³³ Comments of South Dakota Department of Education and South Dakota Bureau of Information and Telecommunications in the Matter of Modernizing the E-Rate Program for Schools and Libraries at 15 (filed September 16, 2013), *available at* <http://apps.fcc.gov/ecfs/document/view?id=7520944031>.

³⁴ Comments of Kansas Department of Education in the Matter of Modernizing the E-Rate Program for Schools and Libraries at 5 (filed September 16, 2013), *available at* <http://apps.fcc.gov/ecfs/document/view?id=7520943866>.

currently at 90%, and thus propose that no rural eligible entity's cap exceed the program's top discount level.

VII. Conclusion

ISTE commends the Commission for launching this timely rulemaking on this most essential program. The E-Rate has enjoyed 15 years of sterling success and we believe, with some appropriate refocusing and increased funding, the program can continue to ensure that all of our nation's K-12 schools and libraries will gain access to the bandwidth they need for digital learning in the coming decades. ISTE's members look forward to working with the Commission to ensure that E-Rate becomes stronger and that all students, educators and library patrons can truly be connected learners.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Brian C. Lewis". The signature is fluid and cursive, with the first name "Brian" being the most prominent.

Brian C. Lewis
Chief Executive Officer
International Society for Technology in Education

November 8, 2013