

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554**

In The Matter Of)	
)	CC Docket No. 02-6
Schools and Libraries Universal Service)	
Support Mechanism)	GN Docket No. 09-51
)	
A National Broadband Plan)	
For Our Future)	

**COMMENTS OF THE
SCHOOLS, HEALTH AND LIBRARIES BROADBAND (SHLB) COALITION**

The Schools, Health and Libraries Broadband (SHLB) Coalition (“SHLB Coalition”)¹ respectfully submits these comments in response to the Commission's recent Notice of Proposed Rulemaking regarding the E-rate program.² The SHLB Coalition consists of 57 members, including representatives of schools, health care providers, libraries, private sector companies, state and national research and education networks, and public safety and consumer organizations.³

The mission of the Schools, Health and Libraries Broadband Coalition is to promote policies that will enhance the broadband services available for schools, libraries and health care providers so that they can enhance the quality and availability of essential services they provide to the general public. High-capacity broadband is the key infrastructure that K-12 schools, community colleges, colleges and universities, libraries, hospitals, health clinics and other health care providers need to provide 21st century education, information and health services. Enhancing the broadband capabilities of these community anchor institutions is especially vital for these institutions to serve the needs of the most vulnerable segments of our population – those in rural areas, low-income consumers, disabled and elderly persons, students, and many other disadvantaged members of our society.

¹ “SHLB Coalition” is pronounced “Shell-Bee Coalition.”

² See, *In the Matter of Schools and Libraries Universal Service Support Mechanism, A National Broadband Plan for Our Future*, Notice of Proposed Rulemaking, CC Docket No. 02-6, GN Docket No. 09-51, FCC 10-83 (rel. May 20, 2010) (“Notice”).

³ See www.shlbc.org for a list of the members of the SHLB Coalition.

I. The E-rate Program Is Extremely Important.

The Commission has correctly acknowledged the tremendous value of the E-Rate program. The SHLB Coalition wholeheartedly agrees with the Commission's statement that the E-Rate program "has been extremely successful in enabling virtually all schools and libraries to provide telecommunications services and Internet access to students and communities across America."⁴

The General Accounting Office also recently acknowledged the importance of providing schools and libraries with telecommunications and Internet access through the E-rate program:

In the years since the [E-rate] program was established, schools and school districts have come to rely heavily on telecommunications networks to deliver educational content and to administer student achievement tests. Public-access computer terminals in libraries, particularly those in economically disadvantaged and insular areas, are in high demand as the Internet becomes more integral to obtaining government services and participating in commerce.⁵

At the same time, the SHLB Coalition also agrees with the Commission that "there is more to be done to ensure that this program helps our children and communities prepare for the high-skilled jobs of the future and take advantage of the modern communications era."⁶ The program has not been significantly changed since it was first established 13 years ago, and some adjustments to the program are warranted to update the program to match the current marketplace and enhance its effectiveness.

To illustrate the increasing importance of the E-rate program to expanding broadband access at schools and libraries, consider the following two examples:

1. The Baltimore Sun recently (July 5, 2010) included the following story:

Tucked under a public library computer keyboard was an anonymous note: "Thank you for helping me get a job." The paper scrap turned up at downtown Baltimore's [Enoch Pratt Free Library](#), where staff members say their 160 computers are enabling unemployed people to find jobs, do homework or manage their budgets. "From McDonald's to

⁴ Notice, para. 3.

⁵ GAO Report: "Telecommunications: Long-Term Strategic Vision Would Help Ensure Targeting of E-rate Funds to Highest-Priority Uses," March 2009. ("GAO Report"), p.2.

⁶ Notice, para. 3.

McDonnell Douglas, 85 percent of all hiring is done online," said Pratt CEO Carla D. Hayden. "In a city like Baltimore, where 30 percent of the population has no home computer access, we have found a new role." The banks of crowded computers illustrate the changing role of libraries, where technology is replacing paper and the throngs keep coming. Libraries are busy providing research services, such as job hunting and resumes, to people who don't have these resources at home.⁷

2. The New Media Consortium's 2010 Horizon Report identifies and describes emerging technologies likely to have a large impact on teaching, learning, research, or creative expression within education around the globe. The report found a dramatic increase in the use of "cloud computing" at K-12 schools:

While it was difficult to find examples of the use of cloud computing in schools a year ago, there are now many, many schools that have adopted cloud-based tools for productivity, scheduling, curriculum development, and collaboration, at least at the administrative level. This shift has moved cloud computing firmly into the near horizon for 2010.

Cloud computing can offer significant cost savings in terms of IT support, software, and hardware expenses. It has become common for schools to use cloud-based applications to manage calendars, rosters, grade books, and communication between school and home,

The value of cloud computing as a way to provide access to services and tools without the need to invest in additional infrastructure makes it an attractive option for many schools.⁸

As explained below in greater detail, the SHLB Coalition

- supports reducing the administrative complexity of the E-rate process;
- supports providing schools and libraries greater flexibility in choosing the services that are most suited to their needs, and especially "dark fiber";
- has great concerns about expanding the list of eligible services to include wireless services beyond the classroom; and
- supports permitting all entities, including non-telecommunications carriers, to provide "telecommunications services" under the E-rate program.

The last of the four bullet points above, (raised indirectly by the Notice) will go a long way toward improving the effectiveness of the E-rate program. Allowing non-telecommunications

⁷ "Technology Comes to Baltimore's Public Libraries," by Jacques Kelly, The Baltimore Sun, July 5, 2010, available at http://articles.baltimoresun.com/2010-07-05/news/bs-md-pratt-hayden-20100705_1_job-seekers-electronic-library-reading-devices.

⁸ Pp. 9-10. <http://www.nmc.org/pdf/2010-Horizon-Report-K12.pdf>.

carriers, such as state R&E networks and municipalities, to provide basic telecom and broadband services through the E-rate program will lower the costs of broadband connectivity for schools and libraries across the country, will potentially allow more schools and libraries to participate in the program, and will improve the learning and educational opportunities for the general public.

The following discussion comments on many of the issues raised in the Notice, in the order they are discussed in the Notice.

II. Streamlining the Application Process Would Improve the Effectiveness of the E-rate Program.

The SHLB Coalition strongly supports efforts to reduce the administrative complexity of the application process. Our members frequently encounter administrative obstacles that make it extremely difficult to apply for E-rate support. We understand that some needy schools and libraries at times are unable to apply for E-rate support simply because the application process is too daunting. As early as 2003, the American Library Association testified to the FCC that only about 50% of libraries participate in the E-rate program, in part because of the complexity of the filing process.⁹

Currently about 50% of public libraries are estimated to participate in the e-rate program and the ALA believes participation would increase considerably if the program were simpler. State coordinators tell numerous stories about libraries that would apply for e-rate discounts except that staff is too intimidated by the program's complexity.

Similarly, the American Association of School Administrators and the Association of Educational Service Agencies filed comments last November that identify the complexity of the process as one of the reasons that many schools are unable to apply for E-rate funding:

Schools who are not participating often do not apply for the E-Rate program because the overall process is seen as bureaucratic and complicated. This is even truer for the smallest applicants. Many times, the staff in small schools are

⁹ See, Comments of the American Library Association, before the Federal Communications Commission, Public Forum on Improving Administration of the E-rate Program, May 8, 2003, at <http://www.ala.org/ala/issuesadvocacy/telecom/erate/eratetestimony.cfm>.

responsible for so many different jobs and responsibilities that adding on the complication of the E-Rate process can be seen as more trouble than it is worth.¹⁰

With one exception, the SHLB Coalition is not in a position to suggest specific changes to the application process at this time. We realize that the FCC has proposed several changes, and we also understand that other parties (such as EdLiNC) are filing specific proposals, and we urge the Commission to consider those proposals seriously.

The only proposed change to the E-rate process that we address is the Commission's proposal to bar E-rate applicants from participating on the boards of local service providers.¹¹ This is an overly burdensome proposal, and may have the effect of reducing school and libraries' access to telecommunications and broadband services. Representatives of schools and libraries have often sought to be invited to participate on the boards of their local broadband providers. Such participation gives the school/library the opportunity to ensure that the broadband provider recognizes the unique needs of the school/library communities as the broadband provider designs and deploys its network facilities and services. This is particularly important in small towns and other less populated regions where there may simply not be enough trained and qualified people available to understand the technology and the needs of the applicants.

This issue is also very important to the National Broadband Plan's recommendation 8.22 on the role of state research and education (R&E) networks in the development of Unified Community Area Networks (UCANs). As the R&E networks reach out to help their schools and libraries with broadband connectivity the schools and libraries obviously want a "seat at the table." Not allowing such relationships will significantly impede the development of such UCANs. The SHLB Coalition urges the Commission to not to adopt this prohibition on board positions, or, in the alternative, to establish conflict of interest rules (such as recusals) to prevent a board member from exercising any undue influence over the process of selecting a broadband provider.

¹⁰ See, Comments of the American Association of School Administrators and the Association of Educational Service Agencies in Docket No. 02-6, Nov. 20, 2009, in response to National Broadband Plan Public Notice #15, at <http://fjallfoss.fcc.gov/ecfs/document/view?id=7020349582>.

¹¹ See, Notice, Paragraph 29 ("Applicant employees or board members may not serve on any board of any type of telecommunications, Internet access, or internal connections service provider that participates in the E-rate program in the same state;").

III. Schools and Libraries Should Have Greater Flexibility to Lease Dark Fiber, but Expansion of the Program to Cover Wireless Services Outside of the School Grounds May be Problematic.

A. Wireless Services Outside of School.

The SHLB Coalition has concerns about extending the E-rate program to cover the eligibility of wireless services used outside of school. The Commission proposes “full E-rate support for wireless Internet access service used with a portable learning devices [stet] that are used off premises.” (Notice, para. 45). The Commission cites studies that document the benefits of laptops at home, but do not appear to identify the benefits of providing the school’s wireless Internet access at home. The SHLB Coalition supports the goal of increasing broadband access at the home, but the E-rate program, which is already straining to keep up with the access needed by schools and libraries themselves, is not the best option to pay for improved residential services.

The proposal in the Notice (and in the National Broadband Plan) is not well explained and raises a variety of questions that could have significant impact on the E-rate program. For instance, what “wireless services” would be covered? If schools are implementing wireless Internet access services already under the current rules, is there any need to change the rules? How do the cost allocation rules work if a student brings her/his own laptop to the school, uses it with the school’s wireless service, and then brings the laptop home? Does it matter if the student uses the laptop at home with the school’s wireless service or some other wireless service? How much would such a proposal cost, and how much funding from the E-rate program would be required? How many residential consumers would benefit from this change in the rule? How would the Children’s Internet Protection Act (CIPA) rules be implemented and how would a school enforce the requirement that home use be for “educational purposes” only?

Expanding the “schools and libraries” program to cover “residential services” would be an extremely significant change in the purpose and philosophy of the E-rate program. The SHLB Coalition urges the FCC to obtain answers to these questions (and to put the proposals out for additional comment) so that the impact of this expansion on schools and libraries could be fully evaluated before taking the unprecedented step of expanding the scope of the program to cover the costs of residential service.¹²

¹² The SHLB Coalition thus opposes the idea of authorizing this program on an interim basis in 2011 until more is known about how the proposal would work. (see Notice, para. 51).

B. Expanded Access to Low-Cost Fiber

The SHLB Coalition strongly supports the proposal “to make leased dark fiber from any source eligible for funding as a priority one service.” (Notice, para. 53). The National Broadband Plan is correct in asserting that dark fiber¹³ may be a cost-effective alternative for many schools and libraries. For instance, Ciena describes the benefits of dark fiber as follows:

A major advantage to choosing dark fiber is the ability to upgrade bandwidth as needed without incurring any additional monthly cost for the network. Other benefits include choosing ideal maintenance windows and schedule upgrades to equipment at convenient times for the organization, not the carrier. With dark fiber, a customer has a nearly infinite amount of capacity, making the network scalable and cost-effective.¹⁴

The addition of dark fiber to the list of eligible services will give schools and libraries an additional option to satisfy their telecommunications and broadband needs. This is not to say that dark fiber will always be the best alternative. Schools and libraries must be careful to explore the full range of costs associated with implementing dark fiber to make sure it is the most affordable option. Nonetheless, the school/library is in a much better position than the FCC to make this calculation, and we urge the FCC to allow the schools and libraries to have this option available to them from both telecommunications carriers and non-telecommunications carriers.

In permitting dark fiber to be eligible for E-rate support, it will be important for the Commission to be particularly clear about the rules that apply to dark fiber, so that schools and libraries can make informed decisions and do not unintentionally come into conflict with the rules. For instance, the Commission should clarify whether or not the build-out costs of dark fiber are eligible for support, whether the equipment to “light” the fiber is eligible, whether rights-of-way costs are eligible, etc. In addition, the SHLB Coalition asks the Commission to make the following three clarifications:

¹³ Ciena describes dark fiber as follows: “When a customer leases dark fiber, they are leasing the infrastructure on which service is delivered. The customer is responsible for all the electronics required to deliver service between locations. The customer has leased the fiber over which the light is transmitted that creates service. The fiber itself provides no service to the customer but allows the customer to build a network with his own equipment and deliver service at any speed based on the equipment deployed.” See, “FiberLocator Dark Fiber 101 Tutorial: Shedding New Light on Dark Fiber,” by Ciena, available at http://www.ciena.com/files/FiberLocator_Dark_Fiber_101_Tutorial_WP.pdf.

¹⁴ Id..

1. As mentioned earlier, the SHLB Coalition supports adding "leased dark fiber" to the eligible services list by both telecommunications providers and non-telecommunications providers. We note, however, that, while the NPRM suggests adding "leased dark fiber" to the eligible services list, the National Broadband Plan goes a bit further and also recommends that E-rate applicants should be able to lease or **lease/own** dark fiber.¹⁵ Some providers maintain that a long-term lease (such as a 20-year IRU) or even ownership may provide schools and library systems with additional security and stability and lower costs. But the question of long-term leases/ownership raises some additional issues that the SHLB Coalition would like to explore before it can decide whether to ask for lease/owned or owned dark fiber to be added to the eligible services list.

2. The Commission should state explicitly that dark fiber can be provided by any non-common carrier provider, including state and national research and education (R&E) networks, as well as governmental entities such as municipalities. Many state and national R&E networks specialize in serving the needs of the schools and libraries and other anchor institutions. Indeed, the National Broadband Plan explicitly recognized the important role played by the R&E networking community (especially Internet2 and NLR) in Chapter 8 of the National Broadband Plan.¹⁶ In the Notice, the Commission proposes to allow dark fiber "from any source" to be eligible for E-rate support.¹⁷ However, paragraph 54 of the Notice only refers by example to "state, regional or local governmental entities." Furthermore, paragraph 52 refers to dark fiber provided by third parties that are not telecommunications carriers. The SHLB Coalition much prefers the language in paragraph 53 that refers to "any source", and we urge the Commission to clarify that "any source" includes non-profit R&E network providers, as well as government-owned entities, to avoid any uncertainty on this point.

3. It would be useful for the Commission to clarify the legal basis for allowing dark fiber to be added to the list of eligible services, and the legal basis for allowing non-common carrier providers to participate in the E-rate program:
 - a. On the first point, the Commission may note that section 254(h)(2)(A) specifically calls upon the Commission to "enhance access . . . to advanced telecommunications and information services" for schools, libraries and health care providers. "Dark fiber" can be included on the list of eligible services

¹⁵ "Applicants should be able to acquire the lowest-cost broadband service, whether it is a fully leased or a mixed lease/own solution." See, National Broadband Plan, p. 237.

¹⁶ NBP, p. 154.

¹⁷ "We now propose to make leased dark fiber from any source eligible for funding as a priority one service." Notice, para. 53.

without ruling whether it is a “telecommunications” or “information” service. Even if “dark fiber” is not itself a “service”, there is nothing in the Act that prevents “dark fiber” from being eligible for E-rate program, especially because dark fiber does “enhance access” to such services.

- b. On the second point, non-common carrier providers should be eligible to participate in the E-rate program under section 254(h)(1)(B), which requires discounted rates to be provided by “all telecommunications carriers” (a term which is defined in section 3(44) as applying to “any provider of telecommunications services”). Furthermore, section 254(h)(2)(A) requires the Commission to adopt competitively neutral rules, which suggests that non-common carrier providers should be able to participate in the E-rate program on the same terms as commercial providers. Because there does not appear to be any provision in the Communications Act that requires providers of service to schools and libraries to be “common carriers”, we urge the Commission to change its rules to allow non-profit R&E networks and municipalities to be eligible as providers of dark fiber (and other E-rate services as well – see below) whether or not they are “common carriers.”

IV. Allowing Non-Telecommunications Carriers to Participate in the E-rate Program as Providers Would Make More Efficient Use of E-rate Funds.

The SHLB Coalition appreciates the Commission’s desire to increase the amount of funds made available for internal connections (Priority 2 services). However, we do not believe that the solution is to reduce the funding made available for Priority 1 services. Schools and libraries are already struggling to increase their telecommunications and broadband connectivity to keep pace with the growing demand. Furthermore, the Commission’s effort to reduce the administrative complexity of the E-rate program is likely to increase the demand for Priority 1 services even more.

One change the Commission can adopt to make more efficient use of E-rate funding is to clarify that non-common carrier providers are eligible to participate in the E-rate program for ALL eligible services, including “lit” fiber and other telecommunications services (not just dark fiber). Non-profit R&E networks and municipalities have a tradition of offering service to schools and libraries at extremely affordable prices. Because they are non-profit providers, they often seek to recoup only their actual incurred expenses and often reduce their recurring fees substantially once they have recouped their build-out costs. Allowing non-common carrier providers such as R&E networks and municipalities to participate in the E-rate program as

providers of telecommunications services would be consistent with section 254(h)(2), which requires “competitively neutral” rules. Furthermore, explicitly allowing non-common carrier providers, including R&E networks and municipal providers, to participate in the E-rate program will potentially allow the funds in the E-rate program to go farther. To the extent that non-common carrier providers offer lower prices than commercial providers, the amount of the discounted portion would also be lower, which would thereby reduce the draw on the E-rate fund. Eliminating the “common carrier” restriction for telecommunications services and clarifying that R&E networks and municipalities can provide these services will allow more schools and libraries to obtain the benefit of E-rate funding and make more efficient use of the existing fund.

Furthermore, many such R&E networks and not for profit consortia have received grants through the Broadband Technology Opportunities Program (BTOP) to provide service specifically to benefit anchor institutions (and many more such grants to R&E networks are expected in the coming months). By excluding R&E network providers, the current rule skews the market toward commercial providers, even in those cases where the R&E provider is the more efficient alternative. Schools and libraries should be able to procure E-rate discounted telecommunications services from these not for profit R&E network providers to maximize the benefits from the federal BTOP investments.

V. Conclusion

The SHLB Coalition appreciates the opportunity to submit the above views on the E-rate program.



John Windhausen, Jr.
Coordinator
Schools, Health and Libraries Broadband (SHLB) Coalition
jwindhausen@telepoly.com
(202) 256-9616

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