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E-Rate for Schools: Background on Telecommunications Discounts Through the Universal Service Fund

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Summary

Under language enacted in the Telecommunications Act of 1996, a discount on telecommunications services is being implemented for schools and libraries as part of universal service. In general, universal service seeks to ensure the availability of telecommunications services for all consumers, including low-income consumers as well as those in rural and high cost areas. The universal service discount for schools and libraries, known as the *E-rate*, is now in its third award cycle. The E-rate has an annual limit of $2.25 billion in discounts. The Federal Communications Commission (FCC) committed a total of $2.25 billion for the second year, it has also set the third year funding level at $2.25 billion. Applicants for the third year have requested discounts of $4.72 billion. Given concerns about various aspects of the program by some Members of Congress, telecommunications companies, and others, the future of the program remains in flux. This report provides background information on the E-rate, focusing specifically on schools and educational issues involving the E-rate. It will be revised to reflect any substantive changes in the program. For legislative activity on the E-rate, see CRS Issue Brief IB98040, *Telecommunications Discounts for Schools and Libraries: The "E-Rate" Program and Controversies*. For background on technology in precollege education, see CRS Report 96-178, *Information Technology and Elementary and Secondary Education: Current Status and Federal Support*.

Introduction

The universal service concept was created to ensure the availability of telecommunications services for all consumers, including low-income consumers as well as those in rural and high cost areas. The Telecommunications Act of 1996 codified universal service principles in a new section (Section 254) added to the Communications

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Act of 1934. Within the broad framework of universal service, the Telecommunications Act newly included elementary and secondary schools and libraries as beneficiaries of universal service for telecommunications services. This specific support, in the form of discounts on telecommunications services provided to schools and libraries under the universal service program, has become known as the education rate or *E-rate*. The E-rate is available only to public and private, nonprofit elementary and secondary schools (having endowments of less than $50 million), and public libraries, independent research libraries, school libraries (by virtue of being part of schools), and certain private libraries.

This report provides background information on the E-rate, describing implementation and status. It also considers selected educational issues involving the E-rate. The report focuses on the participation of schools in this program. It does not address universal service in general.

Background on the E-rate Provision

Section 254 of the Communications Act of 1934 contains statutory provisions codifying universal service principles in general. As has been noted, under the provisions of Section 254, schools and libraries are designated as beneficiaries of universal service. Section 254 requires that, upon a legitimate request, any telecommunications carrier serving a geographic area is required to make any of its services that are within the definition of universal service available at reduced rates to elementary and secondary schools and libraries for educational purposes (Section 254(h)(1)(B)).

Among seven principles for universal service, the legislation also provides that "[e]lementary and secondary schools and classrooms, health care providers, and libraries should have access to advanced telecommunications services" (Section 254(b)(6)). In describing the telecommunications services that are to be provided, the legislation states that the Federal Communications Commission (FCC) is to establish competitively neutral rules "to enhance, to the extent technically feasible and economically reasonable, access to advanced telecommunications and information services for all public and nonprofit elementary and secondary school classrooms, health care providers, and libraries" (Section 254(h)(2)(A)).

Implementation of the E-rate

The future of the E-rate may be characterized as uncertain, due to opposition from some Members of Congress, telecommunications companies, and others either to the E-rate itself, or to the steps taken to date to implement it. The E-rate was criticized for a variety of reasons, such as its role in prompting telecommunications companies to include a charge on subscribers' telephone bills to pay for it (a charge characterized by some as a tax), its possible subsidy of services in schools and libraries beyond those actually needed or appropriate, the emphasis that the FCC has placed on its implementation purportedly at the expense of other aspects of universal service, and the possible illegality of the actions taken by the FCC in creating the Schools and Libraries Corporation (SLC)[1] to administer the E-rate.

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[1] As discussed below, the SLC has been reconstituted as the Schools and Libraries Division of the Universal Service Administrative Company.

Initial Steps. In its May 7, 1997 order addressing the universal service provisions enacted under the Telecommunications Act, the FCC stated that up to $2.25 billion a year would be made available to support universal service discounts for schools and libraries.[2] These funds for the E-rate come from assessments levied on all interstate telecommunications service providers to implement universal service goals in general (not just the schools and libraries component of universal service). E-rate funds are to be used to subsidize discounts on services provided to schools and libraries.

The FCC determined that services eligible for E-rate discounts are: **telecommunications services** (e.g., basic phone service, high capacity telecommunications connections, etc.), **Internet access costs**, and **internal connections in facilities** (e.g., wiring, file servers, routers, etc.). The discounts for these services are to range from 20% to 90% depending upon the poverty of a school's student population and its location in an area with a high cost of telecommunications service.[3] These discounts became effective January 1, 1998. Schools and libraries are responsible for paying service providers the non-discount portions of eligible service costs; the remainder of the costs (discount amounts) are paid to service providers from E-rate funding.

Among the steps taken to administer the E-rate, the FCC called for the creation of a non-profit corporation — the SLC — to manage the process of applying for and receiving discounted services.[4] However, in response to congressional criticisms of the SLC and the General Accounting Office's analysis concluding that the FCC exceeded its statutory authority when it directed the creation of the SLC,[5] the FCC restructured the E-rate administration. On January 1, 1999, the SLC was merged into the Universal Service Administrative Company which currently administers other portions of the universal service system. The SLC is now known as the Schools and Libraries Division (SLD).

Application and Award Process. In order to apply for discounts, schools and libraries must develop and submit a 3-year technology plan specifying how they plan to integrate technology into their curriculum and programs. Technology plans must be independently approved by a state agency overseeing schools or libraries or another SLD-approved reviewer; plans submitted for application for federal Goals 2000 or the Technology Literacy Challenge programs are accepted without independent approval.

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[2] Federal Communications Commission. *Report and Order*. FCC 97-157. May 7, 1997.

[3] The discounts for schools are based on the percentage of a school's population eligible for free or reduced priced lunches under the National School Lunch program. When that percentage is less than 1%, urban schools receive a discount of 20% while rural schools receive a 25% discount. These discounts rise in stages as the percentage of low-income students increases — when the percentage of low-income students is between 75% and 100%, all schools receive 90% discounts. This matrix of discounts is also used for libraries based on the percentages of students eligible for free or reduced price meals in the school district in which the library is located.

[4] Federal Communications Commission. *Report and Order and Second Order on Reconsideration*. FCC 97-253. July 17, 1997. The FCC ordered the National Exchange Carrier Association (NECA), the temporary administrator of the universal service mechanisms established under Section 254 of the Communications Act of 1934, as amended, to establish the SLC. It did so later in 1997.

[5] U.S. General Accounting Office. Letter to Senator Stevens. Dated February 10, 1998. B-278820.

Beginning on January 30, 1998, a web site has been available to receive and post requests for services from schools and libraries. These initial requests[6] are required to be filed, either electronically or on paper, using Form 470 which describes the services requested and certifies that the applicants are covered by a technology plan. This form is posted on the SLD web site for a competitive bidding period of 28 days during which time potential service providers submit bids to applicants. After the expiration of this period, an applicant is then permitted to submit Form 471 certifying that it has signed a contract for its requested services.

For purposes of allocating discounts among applicants, completed applications (470 **and** 471 Forms filed) submitted to the SLC during a "window period" are considered to have been filed simultaneously; applications filed subsequently are considered for discounts on a first come, first-served basis, depending on the availability of funds. In the first year of the program, the window period was 75 days; the second year of the program had a 127-day window period. There was a 68-day window period for the third year (between November 10, 1999 and January 19, 2000).

SLD informs applicants of its decision through "waves" of funding decision letters which are sent to applicants as decisions are made, rather than waiting for all applications to be processed. Waves are based on the FCC rules of priority; the first priority includes applications requesting discounts for telecommunications services and Internet access; requests for internal connections are second priority, receiving discounts with any funds remaining after priority one discounts are made.

Selected Statistics on Funding and Participation

The FCC adjusted the actual funding level for the E-rate during its first year. The Commission voted to fund the initial round of the E-rate discounts at $1.925 billion over an 18-month period (January 1, 1998—June 30, 1999) in order to align future award periods to the school year. During the first year of the program, somewhat more than 30,000 applications totaling $2.02 billion in funding requests were submitted. As a result, the FCC established funding priorities — telecommunications services and Internet access would be fully funded first; internal connections would be funded beginning with those having the highest need.

Applicants requested an estimated $2.435 billion during the application window for the second year. On May 27, 1999 the FCC set the second year of E-rate funding at the $2.25 billion cap. This amount did not fulfill the estimated total request for funding, but the FCC stated that all applicants would be fully funded for telecommunications services and Internet access; in addition, the neediest schools and libraries would be funded at the same level of first-year discounts for internal connections.[7] Ultimately, the E-rate was able to provide discounts for internal connections to applicants at every level of need.

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[6] Applications can be submitted by individual schools and districts, and by consortia. Only the eligible members of a consortium can receive the E-rate discount.

[7] Federal Communications Commission. *Twelfth Order on Reconsideration in CC Docket No. 96-45*. FCC 99-121. May 27, 1999.

On April 13, 2000, the FCC announced that the program's third year will be funded at $2.25 billion. Over 36,000 applications for third year funding were filed by schools and libraries requesting an estimated $4.72 billion in discounts. Almost 60% of these applicants represent populations where at least half of the students qualify for free or reduced priced lunches (qualifying for discounts between 80 and 90 percent).

As of December 1, 2000, $2.08 billion has been committed for the program's third year. Of funded applications in the third year wave process, approximately 24.3% were from schools, 55.7% from school districts, 17.1% from libraries or library consortia, and 3.0% from school/library consortia. The percentage distribution of the dollar value of the discounts awarded was 5.7% for schools, 82.1% for school districts, 3.15% for libraries and library consortia, and 9.0% for school/library consortia. Of all discounts committed during the third year, 32.8% were for telecommunication services, 9.6% for Internet service, and 57.6% for internal connections. Also, during through wave 29 in the third year, 81.2% of the discounts were to schools and libraries eligible for discounts of 70% or more.[8]

Selected Educational Issues

Current Level of Access. Among the issues that have been raised about the E-rate is whether or not access to telecommunications services and the Internet is widespread throughout elementary and secondary education already. This issue involves consideration of what constitutes access, particularly in light of a debate over whether the intended focus of the E-rate is on the connection of **classrooms**, rather than just schools.[9] According to a 1999 U.S. Department of Education (ED) survey of Internet access in public schools, 95% of all public **schools** have such access, up from 35% in 1994. Between 1994 and 1999, access in **rooms used for instructional purposes** (classrooms, labs, etc.) rose sharply, from 3% of all instructional rooms having Internet access to 63%.

Available Federal Assistance. Another issue is the relationship of the E-rate to existing levels of federal assistance. At the outset, it should be noted that the E-rate is a federally overseen program providing non-federal assistance (i.e., assessments paid by telecommunications providers). The current levels of federal assistance to schools for technology in general have been growing. Nevertheless, there is no definitive estimate of the aggregate level of such federal support. This assistance flows from many different kinds of programs, some specifically targeted on technology for schools, others with

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[8] These figures are subject to change.

[9] Some have contended that the Telecommunications Act of 1996 was not intended to subsidize internal connections (as opposed to "services" as provided for by Section 254) and that, further, many requests for discounts for these connections inappropriately involve expensive and sophisticated equipment. See, for example, Dissenting Statement of Commissioner Harold Furchtgott-Roth, in FCC, *Fifth Order on Reconsideration and Fourth Report and Order in CC Docket No. 96-45*, FCC 98-120. June 12, 1998. Others have responded that internal connections are consistent with Section 254 which provides for telecommunications access to "classrooms." See, for example, FCC, *Report and Order*, FCC 97-157. May 7, 1997.

different focuses but sufficiently broad authorities for their funding to be used for technology.[10] Few of these programs explicitly target services supported by the E-rate.

Impact on Education. Efforts to increase the application of technology, including telecommunications and Internet access, in elementary and secondary education are premised on the belief that such action will have beneficial educational consequences. What is known about the impact of technology and telecommunications access on education? Available research suggests that, under certain conditions, positive effects are possible, not only for students, but also for teachers and the schooling process in general. Students are reported in some cases to have higher academic achievement and more positive attitudes about school work. Achievement gains by special populations of students (e.g., those with learning disabilities) are also reported. As with other technology applications, the myriad ways in which the Internet access is used in schools, and can be used, may preclude any definitive conclusion about its impact. Among the conditions that many see as important for the successful use of technology in schools are appropriate planning by districts and schools, development of teachers' capacity to apply technology, and integration of technology into the curriculum.

Others question whether schools can use technology effectively, whether some groups of students will not have equitable access to technology, whether technology will isolate students, whether technology will divert resources from other school needs, and whether technology, in general, can improve academic performance on a broad scale.

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[10] Available federal assistance includes competitive grants such as ED's Technology Innovation Challenge Grants supporting comprehensive integration of technology into education and the Department of Commerce's Technology Opportunities Program funding telecommunications projects; state formula grants such as ED's Technology Literacy Challenge Fund supporting technology acquisition, teacher training, etc.; and a federal income tax deduction for corporate contributions of computer technology and equipment for K-12 education. Broad authorities under which federal funds can be used for technology in schools include ED's Innovative Education Program Strategies program, an education reform block grant, and ED's compensatory education program supporting local educational agencies' services for educationally disadvantaged students.