

Schools & Libraries Committee

Briefing Book

April 23, 2018

10:00 a.m. - 12:00 p.m. Eastern Time

Universal Service Administrative Company Offices

700 12th Street, N.W., Suite 900

Washington, D.C. 20005

Universal Service Administrative Company Schools & Libraries Quarterly Meeting Agenda

Monday, April 23, 2018 10:00 a.m. – 12:00 p.m. Eastern Time USAC Offices 700 12th Street, N.W., Suite 900 Washington, D.C. 20005

OPEN SESSION	Presenter	Estimated Duration in Minutes
 Schools & Libraries Business Update A. Update on Funding Year (FY) 2018 Application Filing Window B. Update on Funding Year (FY) 2018 Fiber Application Reviews 	Catriona	40
2. Information on Three USAC Internal Audit Division Schools and Libraries Support Mechanism Beneficiary Audit Reports	Latoya Anderson	10
3. Committee Approvals		
A. Consent Items 1. Approval of Schools and Libraries Committee Minutes of January 29, 2018 and March 12, 2018	Chair	10
2. Approval of Moving all Executive Session Items to Executive Session	Ernesto	
B. Approval of Schools and Libraries Support Mechanism 3rd Quarter 2018 Programmatic Budget and Demand Projection for the May 2, 2018 FCC Filing	Catriona	15

EXECUTIVE SESSION Confidential – Executive Session Recommended	Presenter	Estimated Duration in Minutes
4. Schools & Libraries Business Update (Continued) A. Challenges/Risk and Mitigation	Catriona	10

Next USAC Schools & Libraries Committee Meeting

Monday, July 23, 2018 10:00 a.m. – 12:00 p.m. Eastern Time USAC Offices, Washington, DC



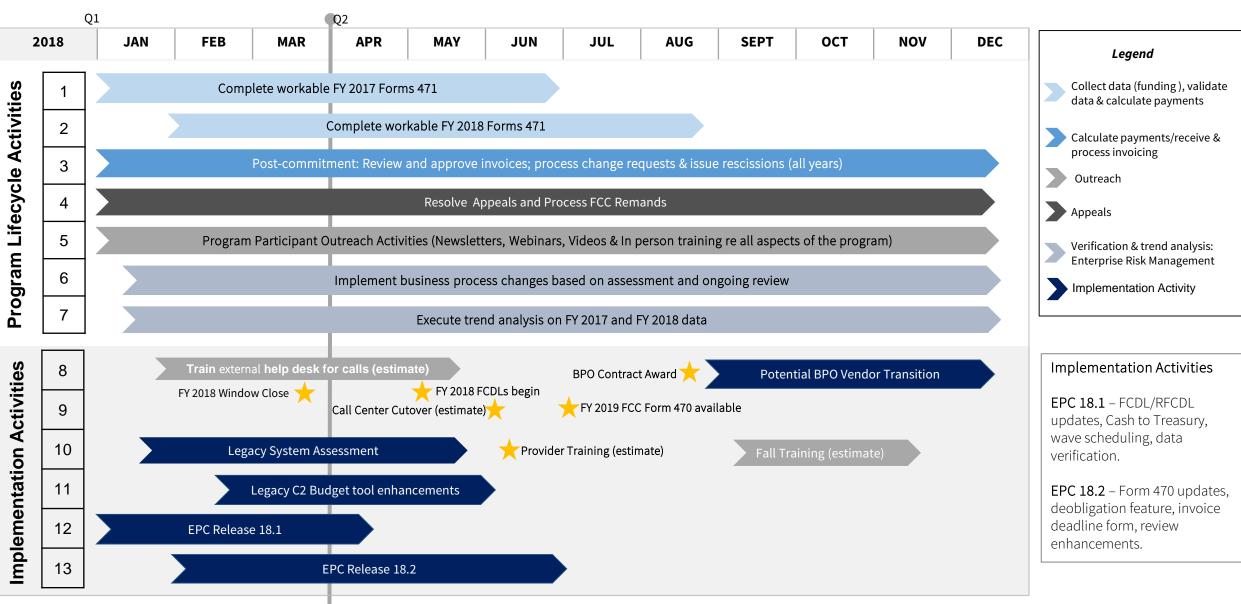
Agenda

Topic	Description	Purpose	Presenter	Length
Program Goals & Objectives	Review of major goals & objectives of the program, as administered by USAC	Informational	Catriona	5 min
Business View				
Program At-a-Glance	Major deliverables and areas of focus, for CY2018, by quarter	Informational	Catriona	10 min
Accomplishments	Overview of significant program accomplishments	Informational	Catriona	5 min
Operational Metrics	Update on the program's operational status and efficiency	Informational	Catriona	5 min
Upcoming Milestones	Overview of upcoming program milestones	Informational	Catriona	5 min
unding Year (FY) 2018 Application Analysis of FY 2018 window demand		Informational	Catriona	5 min
Fiber Review	Update on the review of fiber applications	Informational	Catriona	5 min
Appendix				
Financials Update	Program Financial Obligations and Disbursements Update	Informational	Charlie	

Goals & Objectives

Goals	Objectives / Program Outcomes	How Schools and Libraries will meet the goal
Execute Program Goals	Execute program operations to ensure the fast, simple, efficient, and accurate delivery of Schools & Libraries (SL) funds to those who are eligible.	Ongoing disbursements of funds based on approved funding requests with approved invoices validated by supporting documentation and SL records.
Implement New FCC Orders and Mandates	Implement FCC Orders, policy clarifications/changes and mandates in a timely manner.	Recompete Business Process Outsourcing (BPO) contract; support assessment of sunsetting SL Legacy systems; transition call center to new vendor; and implement 2014 E-rate Orders.
Improve Operational Efficiency and Effectiveness	Increase SL Business productivity through increased efficiency and effectiveness of both SL and USAC operational processes.	Actively support USAC Governance Initiatives; consistently review SL Business Processes to ensure they are aligned with changing FCC Priorities and USAC Business Needs; improve the documentation of processes and decision making within the program.
Improve Program Participant/FCC Experience	Streamline and simplify the program participant experience to enable successful participation. Provide the FCC with timely awareness of program administration issues, be responsive to FCC information requests, and flag issues in need of FCC guidance.	Meet or exceed metrics associated with customer service, turnaround times, and system performance. Continue to cultivate positive relationships with stakeholder groups and program participants. Collaborate with FCC across all SL activities to identify goals and strategies, align on expectations, and track against desired outcomes.
Enhance Program Integrity	Monitor, report, and implement enhanced controls to assess program effectiveness and program business value.	Review SL data to identify trends that require attention, and monitor new issues and develop appropriate solutions. At or below OMB improper payment targets <2%.
Employee Engagement	Enhance individuals through career development and fostering a positive work environment.	Implement action plans, conduct routine individual and team level meetings to exchange information and celebrate successes.

E-rate Program at a Glance



Accomplishments

Funding Year 2018

- Started reviews for FY 2018 FCC Forms 471 on January 31.
- On March 22, 2018, the FY 2017 FCC Form 471 Application Filing window successfully closed.
 - USAC received 35,208 applications requesting funding in the amount of \$2.77 billion. While both dollars and applications were lower, total number of schools and libraries served remained about even.

Funding Year 2017

- \$218 million in FY 2017 commitments in 1Q2018.
- Cumulative commitments are \$2.24 billion. Cumulative disbursed through 1Q2018 is \$590 million.
- 90% of Hurricane Second FY 2017 Window applications completed (Puerto Rico Dept. of Educ./Houston remain).

Overall Schools and Libraries Activities

- Issued SL Business Process Outsourcing RFP, held bidders conference, and opened reading room.
- Reduced post-commitment backlogs across the board and returned all but appeals to historical turnaround times.
- Deployed additional EPC functionality to resolve system blockers, improve functionality, and review FY 2017 Hurricane and FY 2018 applications.
- Implemented guidance on FCC waiver order regarding FY 2016 invoice deadline extensions (DA 18-188).

Operational Performance Metrics (19 Verviewels discussed in Executive Session

Metric		Target	Jan	Feb	Mar	1Q2018 (Avg)	Variance		Description/mitigation
1A	FY 2017 Funding Commitments (\$M)	\$3,228	\$2,852	\$2,924	\$2,989	N/A	\$239	✓	Cumulative
1B	FY 2017 Funding Commitments vol.	40,503	39,874	40,017	40,142	N/A	361	✓	Cumulative
1C	FY 2017 Funding Disbursements (\$M)	\$2,243	\$382	\$510	\$619	N/A	\$1,624	~	Cumulative
2A	FY 2018 Funding Commitments (\$M)	N/A	N/A	N/A	N/A	N/A	N/A		
2B	FY 2018 Funding Commitments vol.	35,208	0	0	0	N/A	35,208	✓	Over 14,000 wave ready as of 4/10/18.
2C	FY 2018 Funding Disbursements (\$M)	N/A	N/A	N/A	N/A	N/A	N/A		
3	IT Systems Health	99.0%	100.0%	100.0%	99.3%	99.8%	0.8%	~	Siebel issue noted, EPC latency due to volume during window.
4	Call Center Abandon Rate	3.0%	6.1%	4.3%	0.9%	3.8%	0.8%	▶	Rate increased in Jan and Feb due to FY 2018 window volumes.
5	Appeals Processing (Avg Days Open)	90	105	111	110	109	-19	▶	Appeals backlog reduction program in place to resolve backlog

Upcoming Milestones

Briefing book excludes all materials discussed in Executive Session

Next quarter, SL will continue to focus on conducting outreach and training, transitioning our call center, supporting the BPO RFP, and processing reviews.

FY 2018 Related Activities:

- Review and make decisions on FY 2018 FCC Form 471 applications.
- Ensure that FY 2018 post-commitment processes are available after first FCDLs.
- FY 2018 invoicing begins July 1.

FY 2019 Related Activities:

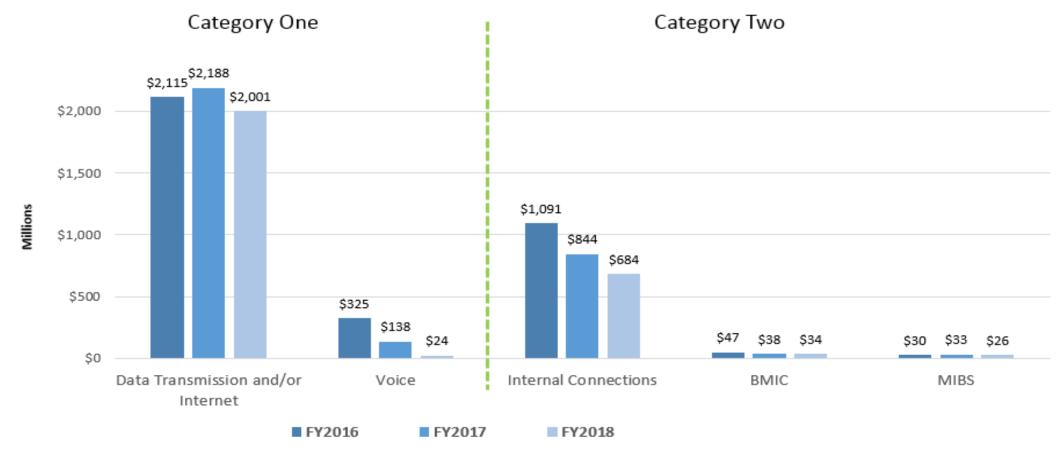
Launch updated FY 2019 FCC Form 470 by July 1.

Overall Schools and Libraries Activities:

- Conduct Service Provider training.
- Support Call Center transition training and cutover.
- Continue to support SL BPO RFP and review responses.
- Complete remaining FY 2017 FCC Form 471 application reviews by June 30.

E-rate FY 2018 Window

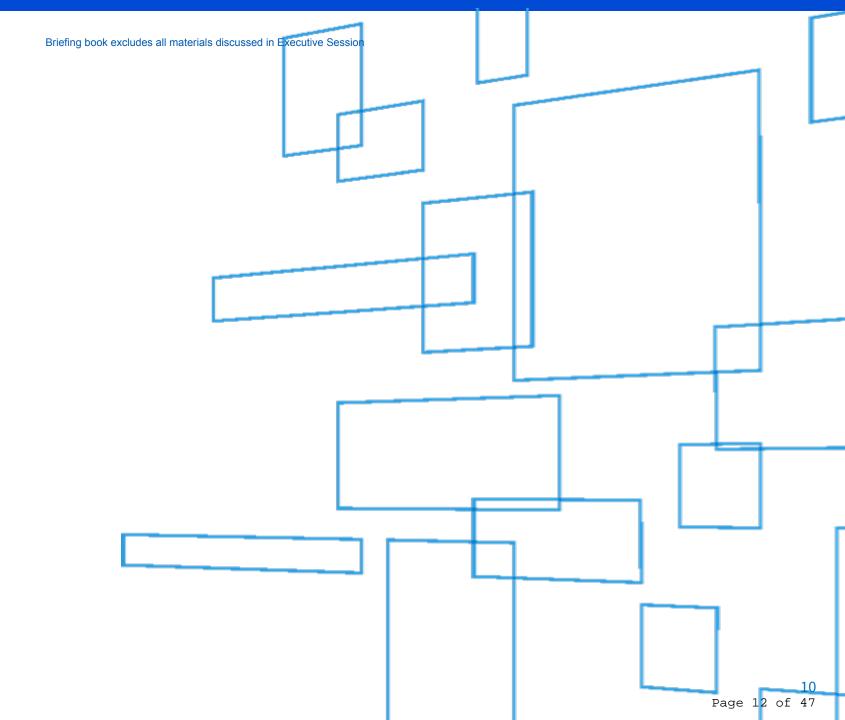
Demand by Service Type FY 2016-2018



Update on Fiber Application Reviews

(For discussion)

Appendix



Finance Update

Data as of March 15, 2018	Funding Year 2017	Funding Year 2018	
(in millions)	Actuals	Estimate	
Program Demand	\$ 3,207	\$ 2,770	
Program Cap	\$ 3,990	\$ 4,062	
Program Cap (Program Demand if less than cap)	\$ 3,207	\$ 2,770	
Administrative expenses (applicable only if demand is greater than cap)	\$ 0.00	\$ 0.00	
Funds Available for Obligation/Disbursement	\$ 3,207	\$ 2,770	
Authorized Disbursements (see Note 1)	\$ 567	\$ 0.00	
Outstanding Obligations (see Note 1)	\$ 1,669	\$ 0.00	

Note 1: Anticipate obligations for Funding Year 2018 will begin in April 2018 and disbursements in July 2018.

Universal Service Administrative Company Schools & Libraries Committee Meeting

INFORMATION ITEM – Executive Session Recommended

Update on Funding Year (FY) 2018 Application Filing Window

Information Presented:

USAC management is providing an update to the USAC Schools & Libraries Committee (Committee) on the Funding Year 2018 FCC Form 471 application filing window that was open from January 11 to March 22, 2018.

Background:

Federal Communications Commission (FCC) rules require that applicants apply for E-rate support annually. They do so during the application filing window which runs in the months preceding the start of the funding year. Applications that are received during the window have equal priority to the available funds, and applications that are filed late (i.e., after the window closes) will not be considered for funding unless the FCC specifically grants a waiver to place the application in window.

The FCC establishes the program cap each year by issuing a public notice and, for FY 2018, the cap was set at \$4.06 billion.² Category One services, which support broadband connectivity to schools and libraries, consist of Data Transmission Services and Internet Access, as well as Voice Services. Category Two services, which support connectivity within schools and libraries, consist of internal connections, basic maintenance of internal connections, and managed internal broadband services. The FCC's E-rate Modernization Order phases out support for voice services, with FY 2018 being the last funding year in which these services are eligible.³

Discussion:

FY 2018 FCC Form 471 Demand

USAC opened the FY 2018 FCC Form 471 application filing window on January 11, 2018, and the window closed successfully on March 22, 2018. During the filing window period, USAC received 35,208 FCC Forms 471 requesting \$2.77 billion in funding for Category One and Category Two services, based on an estimate of the post-discount commitments and form data provided. Both the amount of requested funds and the number of applications are lower than the prior year, which continues a trend started after

¹ See 47 C.F.R. §§ 54.500 et seq.

² Wireline Competition Bureau Announces E-rate Inflation-Based Cap for Funding Year 2018, CC Docket No. 02-6, Public Notice, 2018 WL 1008330 (2018). The exact cap amount is \$4,062,030,726.

³ 29 FCC Rcd 8870, 8923-28, paras. 135-143 (2014).

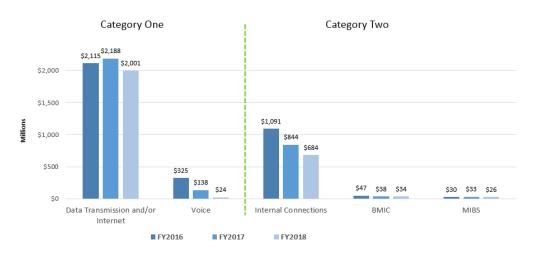
the issuance of the FCC's 2014 E-rate Orders.⁴ While the funds requested have decreased, the total number of schools and libraries receiving E-rate support did not change significantly. This good news indicates that the program remains a key mechanism for funding technology infrastructure in America's schools and libraries. The total number of applicants, however, did drop, which could indicate a shift towards more consolidated applications.

The table below compares the requested demand between the past two funding years.

Funding Year	2017	2018	Percent Change
Post-Discount Requested Dollars (billions)	\$ 3.239	\$ 2.770	-14%
FCC Form 471 Applications	40,615	35,208	-13%
Recipients of Service	116,536	114,192	-2%
Billed Entities	22,908	21,008	-8%

The change in demand is most noticeable in three service types: Data Transmission and/or Internet Access; Voice Services; and Internal Connections. Demand for Basic Maintenance and Managed Internal Broadband Services remained relatively flat.

Demand by Service Type FY 2016-2018



Category One Data Transmission and Internet Access

The FY 2018 dollars requested for Data Transmission and/or Internet Access appear to have dropped by approximately \$186 million. However, upon further review, we believe that a significant portion of this reduction is due to a number of large applicants who filed duplicate or erroneous applications in the prior year, and/or submitted applications after

⁴ Modernizing the E-rate Program for Schools and Libraries, WC Docket No. 13-184, 29 FCC Rcd 8870 (2014); Modernizing the E-rate Program for Schools and Libraries et al., WC Docket Nos. 13-184 et al., Second Report and Order and Order on Reconsideration, 29 FCC Rcd 15538 (2014).

window close this year. The FCC waives its FCC Form 471 deadline if applications come in within 14 days of window close, thus allowing many late-filed applications to be funded. Therefore, we do not believe that there is a significant change in the actual funds requested in this category. Over 50% of the funds requested in this service type are for connectivity provided over fiber Ethernet, which supports the FCC's program goals of providing high speed connections to students and library patrons.

Voice Phase Down

The voice phase down has now entered its fourth year, which means that only applicants that qualify for a 90% discount are eligible for any support, and then only for 10% discount. The \$24 million requested in this category represents an 83% decrease in requested dollars for voice services from FY 2017 (\$138 million). Similar significant reductions were experienced in prior years of the phase down as well.

Fiber Demand

Lit fiber requested dollars for FY 2018 increased by 300% over FY 2017 as the dollars requested for FY 2018 were \$262 million compared with \$89 million in FY 2017. This increase was mostly due to a handful of large consortia requesting Leased Lit Fiber with Special Construction in Arizona, Texas and New Mexico. All of these states have Special Construction State Matching funds, which reduces the applicant's non-discounted share, making the option potentially more attractive. In Texas, the funds expire in August 2019, which may further have encouraged applicants to request these services for FY 2018. Demand for both Dark Fiber (\$91M) as well as Self-Provisioned Fiber (\$44M) was essentially flat over the previous year.

Category Two Demand

For Category Two services, the significant reduction is for Internal Connections, where the reduction in requested dollars for FY 2018 fell 19% from \$844 million in FY 2017 to \$684 million in FY 2018. The requested product types with the most significant decreases are cabling (down by \$42 million) and switches (down by \$38 million). While many schools and libraries have spent Category Two funds, only 38% of all schools and libraries have less than 50% of their budgets remaining. For those entities that have not spent their budgets, libraries are more likely to have not spent these funds, but the discount rate does not appear to be a factor in determining which entities have not spent any Category Two funding.

The data made available to USAC on FCC Forms indicates that 85% of program participants reported that their current Wi-Fi services were sufficient for their needs, which could reduce their requests for Category Two equipment associated with wireless networks.

Time to Apply

For FY 2018, 66% of applicants completed the FCC Form 471 application from start to finish in less than 24 hours, which is a 10% increase in the number of applications completed within 24 hours from FY 2017. The average days to certify for FY 2018 was 5.2 days compared to 5.6 days for FY 2017 and 8.5 days for FY 2016. The reductions over previous funding years are likely due to the implementation of a combination of

INFO Item #1SLA 04/23/18 Page 4 of 4

system enhancements requested from the applicant community, familiarity with the system from prior years, and a more robust and stable system. This is also evidenced by a lower number of calls to USAC's Client Service Bureau during the window reporting system issues that were preventing applicants from completing the online FCC Form 471. Finally, consistent with prior years, over 10,000 applications totaling over \$1 billion were filed in the last 48 hours of the window, and the quickest application was completed in just 171 seconds.

Universal Service Administrative Company Schools & Libraries Committee Meeting

INFORMATION ITEM

Update on Funding Year (FY) 2018 Fiber Application Reviews

Information Presented:

USAC management is providing an update to the USAC Schools & Libraries Committee (Committee) on the status of fiber reviews for Funding Year (FY) 2017 and FY 2018, and process improvements to streamline the process going forward.

Discussion:

The FCC's 2014 E-rate Orders¹ opened the door to additional fiber options for program participants starting with FY 2016, including special construction beyond what was previously eligible as well as additional dark fiber options, and the ability to self-provision networks. While the changes were welcomed in the E-rate community, concerns were raised early on about the length of time that the reviews of fiber applications were taking as well as the volume and level of detail that applicants were asked to provide. Applicants were concerned that very technical questions were being asked, and service providers were worried about sharing confidential pricing details with their customers and/or USAC. Finally, program participants raised questions about unclear guidance and lack of clarity regarding program forms for fiber requests and navigating the review process.

Status of FY 2017 Fiber Application Reviews

USAC received 1,334 applications that included fiber funding requests in FY 2017. To date, USAC has issued funding commitments on over 1,321 (99%) of these applications. The FY 2017 fiber funding requests on these applications requested \$306 million, of which we have issued funding decisions on \$295 million, with just over \$11 million remaining. Of the 13 applications pending at USAC, five are currently awaiting policy guidance, and the remaining eight are completing various stages of the review process. Two of these are being held while the applicant seeks additional information from their service provider.

FY 2018 Fiber Application Reviews.

On March 22, 2018, USAC closed the application window for FY 2018. Requests for Leased Lit Fiber increased significantly over the prior year with requests totaling over \$262 million compared to \$89 million in the prior year. This increase was mostly due to a handful of large consortia applications requesting Leased Lit Fiber with Special Construction in Arizona, Texas, and New Mexico. All of these states have Special

¹ Modernizing the E-rate Program for Schools and Libraries, WC Docket No. 13-184, 29 FCC Rcd 8870 (2014); Modernizing the E-rate Program for Schools and Libraries et al., WC Docket Nos. 13-184 et al., Second Report and Order and Order on Reconsideration, 29 FCC Rcd 15538 (2014).

Construction State Matching funds, which reduces the applicant's non-discounted share, making the option potentially more attractive. In Texas, the matching funds expire in August 2019, which may further have encouraged Texas applicants to request these services for FY 2018. Demand for both Leased Dark Fiber (\$91 M) as well as Self-Provisioned Networks (\$44 M) was essentially flat over the previous year.

Process Improvements

Procedures

When the new rules first went into effect in 2016, a considerable number of new and novel issues emerged during the fiber application review process. This led to delays as guidance was developed, additional questions were asked, and responses were reviewed. Over the past two years the fiber procedures have continued to evolve as different scenarios came to light. At this point, USAC believes that many of the policy issues have been settled with known outcomes, which has resulted in more robust and fulsome guidance for the reviewers, and therefore speeding fiber reviews. In addition, because of our experience with these applications, for FY 2018 we have identified areas where we could better target the fiber review process to identify potential rule violations. USAC is also improving its outreach process by simplifying the questions asked of applicants. Implementing these changes will significantly reduce applicant confusion while still being conscious of protecting against potential waste, fraud, and abuse. Finally, for the past two years, the approval of the fiber review procedures has lagged the approval for regular PIA reviews, which further contributed to delays in processing fiber applications. For FY 2018, we are optimistic that the reviews can begin much sooner than prior years.

Reviews

Because of a combination of procedures and systems issues, fiber application reviews were delayed in both FY 2016 and FY 2017. In addition, instead of the traditional March window close, the application window closed in May and July of 2016 (two windows) for FY 2016 and May 2017 for FY 2017. In sum, this resulted in the review of fiber applications not starting until May 2016 for FY 2016, and June 2017 for FY 2017. In FY 2018, USAC returned to a March window close and we expect the reviews to begin in the near future. Although the first funding year implementing the E-rate Productivity Center (EPC) was fraught with system defects that blocked reviewers from completing their work, by FY 2017 we had resolved a significant number of these defects, which allowed the reviews to proceed more smoothly.

Funding Decisions

Admittedly, the first year of implementation was challenging for the entire E-rate community. USAC learned several lessons from the first year and applied those lessons learned, which ultimately resulted in an expedited fiber review process for FY 2017. Several lessons learned during FY 2017 include:

• By January 2018, 93% of FY 2017 fiber reviews had been issued funding decisions compared to 57% of FY 2016 fiber reviews in January 2017.

 The average number of days between submission of the application to issuance of the funding decision decreased from 260 days in FY 2016 to 179 days in FY 2017.

USAC expects to continue improving average cycle times for fiber reviews in FY 2018 based on the process improvements outlined in this report.

Outreach

USAC has continued reviewing materials that are available to applicants and service providers and is committed to providing a complete set of outreach materials to address our participants' needs. Over the past year, additional clarifications and guidance were posted on the USAC website regarding a number of fiber matters and the FCC Form 470. Building on that, for FY 2018, we will launch several new outreach initiatives including:

- A documentation checklist will be published on our website listing the
 information and documents that applicants may be asked to provide during a fiber
 review. This will allow them to gather the materials early, which will ultimately
 speed the review process if applicants and service providers gather the materials
 in advance.
- 2. Clear instructions will be posted on the website and published in the weekly newsletter about how to request confidential treatment of information and how to submit the information directly to USAC. These instructions will also be emailed to all service providers who are listed on special construction fiber requests. Sharing this information broadly should decrease the length of the review and reduce concerns brought forth by some service providers about disclosing their internal pricing data.
- 3. Questions issued to applicants will contain clear directions, encouraging them to work with their service providers to respond to USAC's technical questions about the fiber builds.

Form Improvements

Over the past year, USAC received considerable feedback form the E-rate community about the dropdown values in the FCC Form 470 and possible confusion about how to request different types of services. In coordination with the FCC, USAC is working to update the language in the form, as well as to add user guidance materials to help applicants avoid mistakes and file successfully. USAC will continue to work with the E-rate community to ensure that this information is widely shared and understood.

In closing, USAC is committed to ensuring the E-rate program continues on its purpose to make access to broadband services available to all eligible schools and libraries across the country. By implementing the changes described above throughout the program lifecycle, USAC is striving to help applicants apply successfully and receive timely funding decisions on their fiber applications.



Fiber Funding Denials

- What information is provided when applicants are denied?
 - Applicants are provided a summary explanation of the program rule violation prior to receiving their Funding Commitment Decision Letter (FCDL).
 - This provides applicants with an opportunity to provide additional documents or explanation to resolve the violation prior to receiving the FCDL.
 - Applicants are encouraged to ask questions to resolve the issue before USAC issues the FCDL.
 - The FCDL contains a narrative explaining the denial decision.

Fiber Funding Denials

- Are applicants provided a detailed explanation of the reasons their applications are denied and what is needed to cure any deficiency?
 - Yes. The final funding decision is issued in the FCDL, which contains a narrative explaining the denial decision.

Fiber Funding Questions

- Can the questionnaire be improved for review of the Funding Year (FY) 2018 fiber applications?
 - USAC plans to improve the outreach process by simplifying the questions in the FY 2018 questionnaire.

Fiber Funding Questions

- It would be helpful if there was specific information about who service providers should contact at USAC to provide required cost or other information on a confidential basis.
 - USAC is preparing guidance for services providers on how to respond to fiber questions while protecting the confidentiality of their answers. This information will be posted on the USAC website, published in our weekly newsletter, and included in our training materials.

Fiber Funding Questions

- USAC should publish fiber questions so applicants can address them "up-front" in their actual applications.
 - A documentation checklist will be published on our website which lists all of the information and documents that applicants may be asked to provide during a fiber review. This allows applicants to start to gather the materials early, which will ultimately speed the review process if applicants and service providers to gather the materials in advance.

FCC Form 470 Dropdowns

- What will happen to applicants who filed FY 2018 applications but were confused and unintentionally selected the wrong FCC Form 470 type of service?
 - Applicants will have an opportunity to clarify whether the correct FCC Form 470 was referenced during PIA review. If there is a mismatch between services requested and the competitive bid posting, the funding will be denied.
 - Applicants may seek a waiver of the competitive bidding rules from the Commission if the service mismatch was because they were confused or unintentionally selected the wrong service type.

FCC Form 470 Dropdowns

- Has USAC explored with service providers and applicants possible modifications to the drop down options for FY 2019 application cycle?
 - USAC received considerable feedback from the applicant community on this issue, including specific changes to wording.
 - In coordination with the FCC, USAC is updating the language in the form dropdowns.
 - USAC will also post guidance materials on our website to help applicants avoid mistakes and file successfully and will share this information through multiple communications channels.



Sample Fiber FCDL Comment

(Applicant denied for three separate reasons)

- DR1 The description for the products and services on the cited FCC Form 470 for all of the products and/or services in the FRN contains a particular manufacturer's name, brand, products and/or services without also specifying "or equivalent". This is a competitive bidding violation because there is no indication that FCC Form 470/RFP is also allowing a service provider to submit a bid for equivalent products and/or services. This undermines the competitive bidding process by eliminating the opportunity for the applicant to purchase an equivalent or better product that may be less expensive or to choose a less expensive service provider.
- DR2 During the review process you provided a document with questions and answers that contains significant information (map and network locations) for the bidders to be able to respond to the FCC Form 470 and RFP. Program procedures require the FCC Form 470, RFP as well as documentation providing any additional or modifying the original information in your FCC Form 470 and/or Request for Proposal be uploaded into the FCC Form 470 in E-rate Productivity Portal for all potential service providers to evaluate. Documentation that contained information needed for potential bidders to respond to your RFP was not uploaded to the E-rate Productivity Portal and thus not made available for all potential vendors to evaluate. Therefore, this FRN is denied.
- DR3 FCC Rules require applicants to evaluate the cost effectiveness of the fiber solutions and to choose the most cost effective solution. Documentation provided failed to demonstrated that self-provisioned network solution is more cost effective than the leased dark fiber solution based on total cost. Therefore, the applicant has violated the competitive bidding program rules.

Universal Service Administrative Company Schools & Libraries Committee Meeting

INFORMATION ITEM – Executive Session Option

Information on Three USAC Internal Audit Division Schools and Libraries Support Mechanism Beneficiary Audit Reports

Information Presented

This information item provides a summary of the results for three Schools and Libraries Support Mechanism Beneficiary Audit Reports listed in **Exhibit I** to this briefing paper.

Discussion

A general discussion of the findings contained in the draft audit reports is appropriately held in open session. To the extent that Schools and Libraries Committee (Committee) members wish to discuss specific details of the audit findings, USAC staff recommends that, in accordance with the approved criteria and procedures for conducting USAC Board of Directors (Board) and committee business in *Executive Session*, this matter should be considered in *Executive Session* because discussion of specific audit plans, targets and/or techniques would constitute a *discussion of internal rules and procedures*.

Audits were performed on three Schools and Libraries Support Mechanism beneficiaries. The purpose of the audits was to determine whether the beneficiaries complied with Federal Communications Commission (FCC) rules and program requirements. **Exhibit I** to this briefing paper highlights the results of the audits.

Summary of Schools and Libraries Support Mechanism Beneficiary Audit Reports

Entity Name, State Crescent Academy, Michigan	Number of Findings 3	Material Findings • Beneficiary Over-Invoiced the Schools and Libraries Program (SLP) for Ineligible Services and/or Equipment. The Beneficiary failed to remove costs for ineligible services and included costs for unfunded	Amount of Support \$90,628	Monetary Effect \$4,084	USAC Management Recovery Action \$4,084	Entity Disagreement
Dallas Independent School District, Texas	0	services.No Findings.	\$4,161,903	\$0	\$0	N/A
Hebrew Academy for Special Children, New York	0	No Findings.	\$4,879	\$0	\$0	N/A
Total	3		\$4,257,410	\$4,084	\$4,084	

ACTION Item #3SLA02 04/23/18 Attachment A Meeting Minutes of 01/29/18 Page 1 of 7

UNIVERSAL SERVICE ADMINISTRATIVE COMPANY 700 12th Street, N.W., Suite 900 Washington, D.C. 20005

SCHOOLS & LIBRARIES COMMITTEE MEETING Monday, January 29, 2018

(DRAFT) MINUTES¹

The quarterly meeting of the USAC Board of Directors (Board) Schools & Libraries Committee (Committee) was held at USAC's offices in Washington, D.C. on Monday, January 29, 2018. Dr. Dan Domenech, Committee Chair, called the meeting to order at 10:00 a.m. Eastern Time, with all nine Committee members present:

Bocher, Bob Hernandez, Dr. Mike
Buzacott, Alan Mason, Ken – Vice Chair
Choroser, Beth Sekar, Radha – Chief Executive
Domenech, Dr. Dan – Chair Wade, Dr. Joan
Fontana, Brent

Mr. Fontana left the meeting at 11:30 a.m. Eastern Time. He did not vote on item a4.

Other Board members and officers of the corporation present:

Brisé, Ronald - Member of the Board

Davis, Craig - Vice President of Procurement and Sourcing Strategy

Feiss, Geoff – Member of the Board

Gillan, Joe – Member of the Board

Kinser, Cynthia – Member of the Board

Lee, Karen – Vice President of Rural Health Care

Lubin, Joel – Member of the Board

Salvator, Charles – Vice President of Finance, Chief Financial Officer and Assistant Treasurer

Scott, Wayne – Vice President of Internal Audit

Sweeney, Mark – Chief Operating Officer

Wein, Olivia – Member of the Board

Wibberly, Dr. Kathy – Member of the Board

¹ Draft resolutions were presented to the Committee prior to the Committee meeting. Where appropriate, non-substantive changes have been made to the resolutions set forth herein to clarify language where necessary or to correct grammatical or spelling errors.

ACTION Item #3SLA02 04/23/18 Attachment A Meeting Minutes of 01/29/18 Page 2 of 7

Others present:

NAME COMPANY

Anderson, Jarnice USAC Anderson, Latoya USAC

Augustino, Steve Kelly, Drye & Warren LLP

Ayer, Catriona **USAC** Beach, Cyndi **USAC USAC** Beaver, Tracey Beckford, Ernesto **USAC** Bethel, Tameca **USAC** Butler, Stephen **USAC** Calhoun, Mitch **USAC** Carpenter, Nikki-Blair **USAC** Daniels, Joel **USAC** Delmar, Teleshia **USAC USAC** Ejaz, EJ Frelow, Leslie **USAC** Goode, Vernell **USAC** Gerensky, Mitko **USAC** Gross Guinan, Gabriella **USAC** Holloway, Chanelle **USAC**

Hughet, Pamela USAC
Hutchinson, Kyle USAC
Jones, Frank Solix, Inc.

Kaplan, Peter Funds for Learning, LLC

Lear, Kathleen Maximus Federal Services, LLC

Lee, Brandon USAC

LeNard, David E-rate Elite Services, Inc.

McCornac, Carolyn

Miller, Jack

Nuzzo, Patsy

Rovetto, Ed

USAC

USAC

Schell, Julie Pennsylvania Department of Education

Schrieber, Johnnay USAC Sequin, Eric Solix, Inc. Smith, Chris USAC

Talbott, Dr. Brian Dimensional Learning Solutions, LLC Veith, Lisa Maximus Federal Services, LLC

Voth, Cara FCC Wolf, Alex USAC

ACTION Item #3SLA02 04/23/18 Attachment A Meeting Minutes of 01/29/18 Page 3 of 7

OPEN SESSION

- **a1.** Consent Items. Dr. Domenech introduced this item to the Committee.
 - A. Committee meeting minutes of October 23, 2017.
 - B. Approval for discussing in *Executive Session* agenda items:
 - (1) **i3** Schools & Libraries Support Mechanism Business Update Continued. USAC management recommends that discussion of this item be conducted in *Executive Session* because this matter relates to USAC's *processing procedures and Information Systems development*.
 - (2) **a4 -** Consideration of a Contract Award for Appian Cloud Licenses. USAC management recommends that discussion of this item be conducted in *Executive Session* because this matter relates to USAC's *procurement strategy and contract administration*. This matter is also subject to *attorney/client privilege*.
 - (3) **a5** Approval of 2018 Annual Schools and Libraries Support Mechanism Programmatic Budgets. USAC management recommends that discussion of this item be conducted in *Executive Session* because this matter relates to USAC's *procurement strategy and contract administration*.
 - (4) **i4** Update on Request for Proposal for IT Services Contract for E-rate Productivity Center (EPC). USAC management recommends that discussion of this item be conducted in *Executive Session* because this matter relates to USAC's *procurement strategy and contract administration*.
 - (5) **i5** Update on Request for Proposal for Business Process Outsourcing Services. USAC management recommends that discussion of this item be conducted in *Executive Session* because this matter relates to USAC's *procurement strategy and contract administration*.

On a motion duly made and seconded, and after discussion, the Committee adopted the following resolutions:

ACTION Item #3SLA02 04/23/18 Attachment A Meeting Minutes of 01/29/18 Page 4 of 7

RESOLVED, that the USAC Schools & Libraries Committee hereby approves: (1) the Committee meeting minutes of October 23, 2017, and (2) discussion in *Executive Session* of the items noted above.

a2. Approval of Schools and Libraries Support Mechanism 2nd Quarter 2018
Programmatic Budget and Demand Projection for the January 31, 2018 FCC
Filing. Ms. Ayer, Acting Vice President of Schools and Libraries, presented this item for consideration.

On a motion duly made and seconded, and after discussion, the Committee adopted the following resolutions:

RESOLVED, that the USAC Schools and Libraries Committee approves a 2nd Quarter 2018 Schools and Libraries Support Mechanism operating budget of \$17.66 million; and

RESOLVED FURTHER, that the USAC Schools and Libraries Committee directs USAC staff to submit a collection requirement of \$17.66 million for the Schools and Libraries Support Mechanism administrative costs in the required January 31, 2018 filing to the FCC on behalf of the Committee; and

RESOLVED FURTHER, that the USAC Schools and Libraries Committee, having reviewed at its meeting on January 29, 2018, a summary of the 2nd Quarter 2018 Schools and Libraries Support Mechanism demand estimate, hereby directs USAC staff to proceed with the required January 31, 2018 filing to the FCC on behalf of the Committee. USAC staff may make adjustments if the total variance for the Schools and Libraries Support Mechanism is equal to or less than \$10 million, or may seek approval from the Schools & Libraries Committee Chair to make adjustments if the total variance is greater than \$10 million, but not more than \$15 million.

a3. Recommendation for Election of Committee Chair and Vice Chair. Mr. Mason, Chair of the Nominating Committee, provide the Nominating Committee's recommendations for Chair and Vice Chair of the Schools and Libraries Committee.

On a motion duly made and seconded, and after discussion, the Committee adopted the following resolutions:

RESOLVED, that the USAC Schools & Libraries Committee recommends that the USAC Board of Directors elect **Dr. Daniel Domenech** as Chair and **Mr. Ken Mason** as Vice Chair of the Committee. The term for each position begins immediately upon the election to such position by

ACTION Item #3SLA02 04/23/18
Attachment A
Meeting Minutes of 01/29/18
Page 5 of 7

the Board and ends at such time as the Chair or Vice Chair (as the case may be): (i) is replaced by a successor selected by the Board, (ii) resigns from the Committee or the Board, (iii) is removed by resolution of the Board, or (iv) is no longer a member of the Board (whichever comes first).

- i1. Information on Ten USAC Internal Audit Division Schools and Libraries Support Mechanism Beneficiary Audit Reports. Ms. Delmar, Senior Director of Internal Audit, presented this item for discussion.
- i2. Schools and Libraries Support Mechanism Business Update. Ms. Ayer and Ms. Frelow, Director of Program Management, presented this item for discussion. Ms. Ayer reported that for Funding Year (FY) 2017, 97.6% of applications have been reviewed and \$2.03 billion committed through 4Q2017, which is a 25% increase in dollars obligated compared to the same period for FY 2016. Ms. Frelow reported that USAC Information Technology (IT) staff delivered capabilities to conduct a second FY 2017 application window for applicants affected by the 2017 hurricanes and to identify and review applications submitted by affected entities in this window. A total of 103 applications were received during the FY 2017 hurricane window, requesting \$10 million in support after program discounts are applied. She also noted that special news briefs and trainings were offered in Spanish to keep applicants current with updates and next steps. Ms. Aver also reported that the E-rate Productivity Center (EPC) development was complete for all EPC functionality including post-commitment processing. She stated that the division is focused on planning in-person and online training opportunities for program participants, implementing EPC enhancements, and reducing the post-commitment backlogs created while postcommitment processing functionality was being completed.

Mr. Bocher and Mr. Fontana noted that there are problems with fiber applications that are requesting special construction and requested a more formal response on special construction and fiber. Ms. Choroser noted that the questionnaire is difficult to complete even for someone who understands the process and suggested that a pre-check list would be helpful.

At 11:01 a.m. Eastern Time, on a motion duly made and seconded, the Committee moved into *Executive Session* for the purpose of discussing the confidential items listed above.

ACTION Item #3SLA02 04/23/18 Attachment A Meeting Minutes of 01/29/18 Page 6 of 7

EXECUTIVE SESSION

- **i3. Schools & Libraries Support Mechanism Business Update Continued.** Ms. Ayer continued this discussion with the Committee.
- **Approval of 2018 Annual Schools and Libraries Support Mechanism Programmatic Budgets.** Ms. Ayer presented this item for consideration.

On a motion duly made and seconded and after discussion, the Committee adopted the following resolutions:

RESOLVED, that the USAC Schools and Libraries Committee approves a 2018 annual Schools and Libraries Support Mechanism operating budget of \$67.27 million; and

RESOLVED FURTHER, that the USAC Schools and Libraries Committee approves a 2018 annual Schools and Libraries Support Mechanism capital budget of \$0.21 million.

- **i4. Update on Request for Proposal for IT Services Contract for E-rate Productivity Center (EPC).** Mr. Davis presented this item to the Committee for discussion, noting that a Committee meeting would be scheduled in the next few weeks for the purpose of requesting approval for this item.
- i5. Update on Request for Proposal for Business Process Outsourcing Services.

 Mr. Davis presented this item to the Committee for discussion.

At 11:56 a.m. Eastern Time, the meeting continued in *Executive Session* with members of the Board and Leadership present.

a4. Consideration of a Contract Award for Appian Cloud Licenses. Mr. Joel Daniels, Senior Director, Software Development, presented this item for discussion. Mr. Daniels explained that this related to the exercise of a renewal option for Appian cloud services.

On a motion duly made and seconded, and after discussion, the Committee adopted the following resolution:

RESOLVED, that the USAC Schools & Libraries Committee, having reviewed the recommendation of USAC management, hereby authorizes management, subject to FCC approval, to renew the Appian Cloud Licenses in an amount not to exceed \$1,715,435 for continued use of the EPC system.

ACTION Item #3SLA02 04/23/18 Attachment A Meeting Minutes of 01/29/18 Page 7 of 7

At 12:08 p.m. Eastern Time, on a motion duly made and seconded, the Committee moved out of *Executive Session* and immediately reconvened in *Open Session*, at which time Dr. Domenech reported that in *Executive Session*, the Committee took action on items a4 and a5 and discussed items i3, i4 and i5. On a motion duly made and seconded, the Committee adjourned at 12:09 p.m. Eastern Time.

/s/ Ellis Jacobs
Secretary

ACTION Item #3SLA02 4/23/18 Attachment B Meeting Minutes of 03/12/18 Page 1 of 3

UNIVERSAL SERVICE ADMINISTRATIVE COMPANY 700 12th Street, N.W., Suite 900 Washington, D.C. 20005

SCHOOLS & LIBRARIES COMMITTEE MEETING Monday, March 12, 2018

(DRAFT) MINUTES¹

A meeting of the USAC Board of Directors (Board) Schools & Libraries Committee (Committee) was held at USAC's offices in Washington, D.C. on Monday, March 12, 2018. Mr. Ken Mason, Committee Vice Chair, called the meeting to order at 1:41 p.m. Eastern Time, with a quorum of six of the nine Committee members present:

Bocher, Bob – by telephone Mason, Ken – Vice Chair – by telephone

Buzacott, Alan – *by telephone* Sekar, Radha – CEO Choroser, Beth – *by telephone* Wade, Joan – *by telephone*

Members of the Committee not present:

Domenech, Dr. Dan Fontana, Brent Hernandez, Dr. Mike

Other Board members and officers of the corporation present:

Beckford, Ernesto – Vice President, General Counsel and Assistant Secretary Beyerhelm, Chris – Vice President of Enterprise Portfolio Management, Strategy Davis, Craig – Vice President, Procurement and Strategic Sourcing

Feiss, Geoff - Member of the Board

Gerst Matthew - Member of the Board

Kinser, Cynthia – Member of the Board

Lubin, Joel – Member of the Board

Salvator, Charles – Vice President of Finance, Chief Financial Officer and Assistant Treasurer

Sweeney, Mark – Chief Operating Officer

¹ Draft resolutions were presented to the Committee prior to the Committee meeting. Where appropriate, non-substantive changes have been made to the resolutions set forth herein to clarify language where necessary or to correct grammatical or spelling errors.

ACTION Item #3SLA02 4/23/18 Attachment B Meeting Minutes of 03/12/18 Page 2 of 3

Others present:

NAME	COMPANY
Ayer, Catriona	USAC
Hutchinson, Kyle	USAC
King, Lauren	USAC
Nuzzo, Patsy	USAC

OPEN SESSION

a1. Consideration of Contract Award for E-rate Productivity Center Systems Integrator Services. Mr. Beckford recommended that discussion of this item be conducted in *Executive Session* because this matter relates to USAC's procurement strategy and contract administration.

On a motion duly made and seconded and after discussion, the Committee adopted the following resolution:

RESOLVED, that the USAC Schools & Libraries Committee hereby approves the Committee discussing this item in *Executive Session*.

At 1:42 p.m. Eastern Time, on a motion duly made and seconded, the Committee moved into *Executive Session* for the purpose of discussing the confidential item listed above.

EXECUTIVE SESSION

a1. Consideration of Contract Award for E-rate Productivity Center Systems Integrator Services. Mr. Davis presented this item to the Committee for consideration. Mr. Davis explained that the contract presented for approval was posted by USAC for competitive award pursuant to an RFP.

On a motion duly made and seconded and after discussion, the Committee adopted the following resolution:

RESOLVED, that the Schools and Libraries Committee, having reviewed the recommendation of USAC management, hereby authorizes USAC management to award a single award Indefinite Delivery Indefinite Quantity (IDIQ) task order based firm fixed price (FFP) and time and materials (T&M) contract for systems development and technical services supporting the E-rate Productivity Center (EPC) in the not to exceed amount of \$9,382,837 to Incentive Technology Group, LLC (ITG), subject to required FCC approvals. The contract award is for a one year period. Exercise of options contained in the contract are subject to future Board approval.

ACTION Item #3SLA02 4/23/18 Attachment B Meeting Minutes of 03/12/18 Page 3 of 3

At 1:47 p.m. Eastern Time, on a motion duly made and seconded, the Committee moved out of *Executive Session* and immediately reconvened in *Open Session*, at which time Mr. Mason reported that in *Executive Session*, the Committee took action on item a1. On a motion duly made and seconded, the Committee adjourned at 1:47 p.m. Eastern Time.

/s/ Ernesto Beckford Assistant Secretary

Universal Service Administrative Company Schools & Libraries Committee Meeting

ACTION ITEM

Consent Items

Action Requested

The Schools & Libraries Committee (Committee) is requested to approve the consent items listed below.

Discussion

The Committee is requested to approve the following items using the consent resolutions below:

- A. Approval of Committee meeting minutes of January 29, 2018 and March 12, 2018 (*see* **Attachments A-1 and A-2**).
- B. Approval for discussing in *Executive Session* agenda items:
 - (1) **4A** Business Update (*Continued*). USAC management recommends that discussion of this item be conducted in *Executive Session* because this matter relates to *specific internal controls*.

Upon request of a Committee member any one or more of the above items are available for discussion by the Committee.

Recommended USAC Schools & Libraries Committee Action

APPROVAL OF THE FOLLOWING RESOLUTIONS:

RESOLVED, that the USAC Schools & Libraries Committee hereby approves: (1) the Committee meeting minutes of January 29, 2018 and March 12, 2018; and (2) discussion in *Executive Session* of the items noted above.

Universal Service Administrative Company Schools and Libraries Committee Meeting

ACTION ITEM

Approval of Schools and Libraries Support Mechanism 3rd Quarter 2018 Programmatic Budget and Demand Projection for the May 2, 2018 FCC Filing

Action Requested:

The USAC Board of Directors Schools and Libraries Committee (Committee) is requested to approve the 3rd Quarter 2018 (3Q2018) programmatic budget and demand projection for the Schools and Libraries Support Mechanism for submission to the Federal Communications Commission (FCC) in USAC's May 2, 2018 quarterly filing.

Discussion:

On a quarterly basis, USAC is required to submit to the FCC each program's budget¹ and projected demand for the upcoming quarter² and, for the Schools and Libraries Support Mechanism, estimates of unused funds from prior funding years (FYs).³

Base Demand

The filing window for Funding Year 2018 closed on March 22, 2018. At this time, USAC management estimates demand for Funding Year 2018 is \$2,715.40 million.

The estimated demand is less than the cap for Funding Year 2018. On February 20, 2018, the FCC announced the funding cap for Funding Year 2018 of \$4,062.03 million.⁴ This reflects a 1.8 percent inflation-adjusted increase to the \$3,990.21 million cap from Funding Year 2017.⁵

Funding Requirement

USAC estimates the 3Q2018 funding requirement for the Schools and Libraries Support Mechanism as follows:

¹ 47 C.F.R. § 54.715(c).

² 47 C.F.R. § 54.709(a)(3).

³ 47 C.F.R. § 54.507(a)(5).

⁴ See Wireline Competition Bureau Announces E-rate Inflation-Based Cap for Funding Year 2018, CC Docket No. 02-6, Public Notice, 2018 WL 1008330 (2018).
⁵ Id.

(in millions)	Funding Requirement
Funding Year 2018 Demand	\$2,715.40
Funds Rolled Over from Prior Fund Years	(1,178.65)
Required Collection	\$1,536.75
3Q2018 Funding Requirement ⁶	\$384.19

Projected Administrative Expenses

Projected administrative expenses for the Schools and Libraries program are \$26.52 million, which includes \$15.63 million in direct program costs and \$10.89 million in common allocated costs. Because program demand is less than the cap, administrative expenses can be collected as part of total demand.⁷ Details are provided in the table below.

(in millions)	3Q2018
Direct Program Costs	
Employee Expenses	\$2.02
Professional Services	13.05
Overhead (Direct) ⁸	0.56
Capital Costs (Direct)	0.00
Total Direct Program Costs	\$15.63
Common Allocated Costs	
Operating Costs (Common)	\$10.29
Capital Costs (Common)	0.60
Total Common Allocated Costs	\$10.89
Total Program Budget	\$26.52

Attachment A provides a comparison of actual expenditures to the budget for 1Q2018.

Summary of Demand

Program funding requirement of \$384.19 million is adjusted as follows, resulting in a total projected 3Q2018 demand for the Schools and Libraries Support Mechanism of \$388.36 million:

⁶ Collection requirement represents one quarter of demand for Funding Year 2018.

⁷ Pursuant to 47 C.F.R. § 54.715(c), administrative expenses for each program shall be deducted from the annual funding of each respective program.

⁸ Overhead costs include computer support maintenance agreements (including cloud-hosting costs), printing, postage, meetings, and conferences.

(in millions)	4Q2017	1Q2018	2Q2018	3Q2018
Program Funding Requirement	\$486.57	\$486.57	\$486.57	\$384.19
Prior Period Adjustment ⁹	5.77	38.04	(3.85)	(16.99)
USAC Administrative Expenses	17.46	30.06	28.29	26.52
Interest Income	(10.33)	(9.56)	(4.80)	(5.36)
Total Demand	\$499.47	\$545.11	\$506.21	\$388.36

Recommendation:

USAC management recommends the Committee approve the budget and projection of demand as proposed.

Recommended Schools and Libraries Committee Action:

APPROVAL OF THE FOLLOWING RESOLUTIONS:

RESOLVED, that the USAC Schools and Libraries Committee approves a 3rd Quarter 2018 Schools and Libraries Support Mechanism direct program budget of \$15.63 million; and

RESOLVED FURTHER, that the USAC Schools and Libraries Committee directs USAC staff to submit a collection requirement of \$15.63 million for Schools and Libraries Support Mechanism administrative costs in the required May 2, 2018 filing to the FCC on behalf of the Committee; and

RESOLVED FURTHER, that the USAC Schools and Libraries Committee, having reviewed at its meeting on April 23, 2018, a summary of the 3rd Quarter 2018 Schools and Libraries Support Mechanism demand estimate hereby directs USAC staff to proceed with the required May 2, 2018 filing to the FCC on behalf of the Committee. USAC staff may make adjustments if the total variance for the Schools and Libraries Support Mechanism is equal to or less than \$10 million, or may seek approval from the Committee Chair to make adjustments if the total variance is greater than \$10 million, but not more than \$15 million.

⁹ Prior period adjustments reconcile projections to actual results and include adjustments for billings, interest income, bad debt, and administrative expenses.

Schools & Libraries Administrative Costs

Comparison of actual expenditures to the budget for 1Q2018

(in millions)	1Q2018 Actual	1Q2018 Budget	Variance	1Q2018 Actual to Budget Variance Explanations	2Q2018 Budget	2018 Annual Budget
Direct Program Costs						
Employee Expenses	\$1.66	\$2.02	\$0.36	Lower spending due to vacant positions (41 FTEs vs. 51 forecasted).	\$2.10	\$8.17
Professional Services	13.98	14.97	0.99		14.95	56.62
Overhead (Direct) (see Note 1)	0.48	0.47	(0.01)		0.61	2.48
Capital Costs (Direct) (see Note 2)	0.19	0.21	0.02	Lower spending on outsourced software development.	0.00	0.21
Total Direct Program Costs	\$16.31	\$17.67	\$1.36		\$17.66	\$67.48
Common Allocated Costs						
Operating Costs (Common)	\$9.30	\$10.74	\$1.44	Allocation of common operating costs based on the Cost Allocation Methodology (CAM).	\$10.45	\$41.67
Capital Costs (Common) (see Note 3)	0.10	0.83	0.73	Allocation of common capital costs based on the Cost Allocation Methodology (CAM).	0.18	1.93
Total Common Allocated Costs	\$9.40	\$11.57	\$2.17		\$10.63	\$43.60
Total Program Budget	\$25.71	\$29.24	\$3.53		\$28.29	\$111.08

- Note 1: Overhead costs include computer support maintenance agreements, printing, postage, meetings, and conferences.
- Note 2: Direct capital costs are for EPC software development.
- **Note 3:** Common capital costs include capital costs not directly attributable to a program. This includes hardware and equipment refresh, corporate software development, and shared IT testing and project management resources.