## Before the Federal Communications Commission Washington DC 20554

In the Matter of	) CC Docket No. 02-6
Schools and Libraries Universal Service Support Mechanism	) ) WC Docket No. 13-184

#### EX PARTE COMMENT FOR ELECTRONIC FILING OF FCC FORMS

#### INTRODUCTION

Funds For Learning, LLC (FFL), by its undersigned representative, respectfully submits these comments for consideration by all interested parties. The goal of these comments is to offer insight and ideas for changes to the form filing process of the Schools and Libraries Discount Support Mechanism (E-rate) Program that can ultimately result in measurable improvement in the speed and in the quality of form filings by E-rate stakeholders.

#### BACKGROUND

Funds For Learning, LLC is a regulatory compliance firm that has been specializing in the E-rate program since 1997, shortly before the program launched. FFL has school and library clients and customers in all 50 states. Our school clients, located in both urban and rural areas, range in size from a few dozen students to hundreds of thousands of students. The breadth and diversity of our client base helps to deepen and expand what we know about how the program works and its effectiveness.

In the early years of the E-rate program, FFL developed a Windows-based application called E-rate Advisor<sup>TM</sup>. This program was distributed on CD-ROM and installed on

desktop computers. It stepped applicants through the process of preparing paper Form 470 and Form 471 applications. Over 3,000 copies of E-rate Advisor<sup>TM</sup> were sold each year in 2000 and 2001.

In 2001, as the Internet grew and web-based services began to emerge, FFL moved away from desktop computing and created a web-based platform that we still offer today called E-rate Manager®.

E-rate Manager® is an online suite of electronic tools that help schools to, among many other things, prepare, organize, submit, and archive their E-rate-related paperwork and to monitor the status of their funding commitments in real time<sup>1</sup>. Service providers also use E-rate Manager® tools to prepare their own paperwork, access historic funding data, and monitor E-rate activities. To keep the public informed, we update our website constantly with the latest E-rate-related news and information.

Since the program's earliest days, we have always done whatever we can to improve it. An FFL representative participated in the Commission's 2003 Public Forum on Improving Administration of the E-rate Program, and another FFL representative was an active member of USAC's 2003 Task Force on the Prevention of Waste, Fraud and Abuse. In 2011, we petitioned the Commission successfully to direct USAC to fund more requests for internal connections support, which, we are proud to say, resulted in the *Funds For Learning Order*. This past year, we provided the Commission with a wealth of E-rate funding data, tables, charts and analysis to help the agency in its ongoing review and analysis of the many difficult and complex issues that are facing the E-rate program today<sup>2</sup>.

Through the course of E-rate history, efforts have been made by USAC to improve the process of accepting forms various E-rate stakeholders. The greatest of these is clearly

<sup>&</sup>lt;sup>1</sup> See <a href="http://www.fundsforlearning.com/FFLServices/ErateManagerService.php">http://www.fundsforlearning.com/FFLServices/ErateManagerService.php</a> for additional information.

<sup>&</sup>lt;sup>2</sup> See, e.g. <a href="http://apps.fcc.gov/ecfs/document/view?id=7520927795">http://apps.fcc.gov/ecfs/document/view?id=7520927795</a>, <a href="http://apps.fcc.gov/ecfs/document/view?id=7022426143">http://apps.fcc.gov/ecfs/document/view?id=7022426143</a>, and <a href="http://apps.fcc.gov/ecfs/document/view?id=7521096910">http://apps.fcc.gov/ecfs/document/view?id=7521096910</a>

the online form filing process that USAC has implemented for the submission of certain forms and documents. Funds For Learning commends USAC for its efforts and recognizes that the process for submitting forms has improved since the early days of the program. FFL offers these comments in a spirit of cooperation with USAC to make additional improvements to the process.

#### **DISCUSSION**

Many stakeholders including applicants, service providers, and consultants have leveraged various forms of technology to manage the E-rate process. Some steps taken include automated processes, error checking, and the integration of 'corporate knowledge' into these technologies to ensure that E-rate form filings are complete, accurate, and fully compliant with all applicable E-rate rules and regulations.

There currently exists a disconnect between these industry-created systems and USAC's online form filing and data reporting system. If the two were allowed to connect, all stakeholders would benefit. Fortunately, standards and technologies that are now common-place could easily facilitate the electronic submission of forms and the transfer of data to and between third parties and USAC.

#### BENEFITS TO USAC, THE SLD, AND ALL PROGRAM PARTICIPANTS

Moving to a system of electronic form submission and data transfer via third party systems would be of great administrative benefit to the program. Four of the biggest improvements are (1) saving USAC resources and tightening information security; (2) allowing USAC to focus on their true expertise (e.g. application review, payment processing and compliance audits); (3) increasing accountability to end users – a third party will provide quality, dependable service – or it will fall by the wayside; and, (4) encouraging new and improved services.

### Saving Resources and Tightening Information Security

The current E-rate reform initiative is likely to bring about changes to the program's rules and forms. Allowing third parties to assume the responsibility for developing filing software alleviates the need for USAC to adapt and upgrade their frontend IT infrastructure to accommodate the reform changes. Additionally, the electronic transfer of data via strictly defined standards will allow USAC to tighten its own security.

#### Allowing USAC and the SLD to Focus On Their Expertise

By accepting electronic form submissions from third party systems, USAC is relieved from the burden of being the innovator of E-rate form submission. This allows them to allocate more resources to achieving their goal of effective day-to-day administration of the E-rate program.

One example of how a partnership between USAC and third party systems could work can be seen with the IRS. Third parties have developed software used to prepare and file tax forms. The IRS acknowledges that "Private industry, with established expertise and experience in electronic tax preparation, has a proven track record in providing the best technology and services available." 3

By implementing a similar system for the E-rate program, participants will have the ability to create and/or use software and systems that fit the way they do business. This lessens the administrative burden of the E-rate process for those involved and allows stakeholders to select the technologies that best fit their needs for the completion and submission of E-rate paperwork.

#### Increasing Accountability to End Users

Another benefit for an applicant or service provider is the heightened accountability that comes from the use of third party services. There exists, for third parties, a natural incentive to provide highly-responsive, secure, user-friendly, cost-effective and convenient service. If a service fails to deliver along these categories, or if the marketplace provides superior alternatives, applicants will not use a service.

4

<sup>&</sup>lt;sup>3</sup> See IRS website at <a href="http://www.irs.gov/uac/About-the-Free-File-Alliance">http://www.irs.gov/uac/About-the-Free-File-Alliance</a>

If the software developed does not work, or is not serving the needs of E-rate applicants and service providers, it will not be used. This creates a significant measure of accountability for third-parties to deliver a good service.

## **Encouraging New and Improved Services**

The use of third party developers would promote new and improved services, bringing about numerous technical benefits that would positively impact all stakeholders:

- The current USAC-only filing system represents a potential bottleneck and single point of failure. Having multiple e-filing vendors will provide several pathways for preparing and submitting forms.
- For competitive reasons, third parties will have an incentive to provide new and
  enhanced features on a regular basis. This will allow applicants to more quickly
  reap the benefits of newer technologies as they become available. For example,
  new HTML standards may offer a better user experience; or new authentication
  technologies, like using mobile phones to verify a user's identity, may enhance
  network security.
- Knowledge and expertise from the E-rate community can be directly integrated
  into a third party solution. In much the same way that TurboTax® provides
  individuals with guidance on preparing their tax paperwork, third party solutions
  can provide insight and support in ways that USAC cannot because of its unique
  role and responsibilities.
- E-rate functions could be incorporated into broader administrative tools. The E-rate funding process intersects numerous functions within an applicant's organization, such as finance, procurement, and technology. For example, the accounting department may document invoices, while a technology department tracks related assets. Rather than storing information in two places, a third party solution might allow an applicant to have a "one stop shop" to record information, store documents, etc., while integrating with other school district accounting and management software. By its very nature, USAC will never be in a position to provide applicants with this unified type of solution.

#### NEXT STEPS

Implementation of third party electronic filing can be implemented relatively soon. Industry leaders from the E-rate consulting community and technology sectors could form a technical working group that would work with USAC to begin detailing the technical standards necessary to implement e-filing and data transfer. The working group could develop application programming interface (API) documentation that would define how third party systems would interact with USAC and/or the FCC.

- Form data could be provided in a common text format, such as XML or JSON, and the API could respond with feedback indicating the validity of the data and/or the success of the form submission.
- The API could then be provided to developers for creating applications through which E-rate forms can be prepared and filed. An example of how such an API could be prepared is attached as part of this document.<sup>4</sup>

The technical working group could quickly implement standards for paperwork relevant to 2014 and previous funding years, such as the Form 486. Not only would this allow applicants to experience immediate enhancements, it would also provide third parties and USAC with vital experience working together prior to the FY2015 application cycle.

After the FCC announces its plans for FY2015 and later, the same working group could immediately begin work on an API for the Form 470, Form 471, and/or other forms related to FY2015.

#### **SUMMARY**

E-rate stakeholders of all types and sizes could benefit from electronic form submission and data transfer via third party software or services. The benefits to all stakeholders would be immediate and far-reaching. We feel that the benefits outlined above are worthy of further discussion and exploration of the feasibility of such a solution.

6

<sup>&</sup>lt;sup>4</sup> See Exhibit A - "Data Transfer API-Form 486"

# Respectfully submitted,

## FUNDS FOR LEARNING, LLC

By: /s/ John D. Harrington

John D. Harrington Chief Executive Officer Funds For Learning, LLC 2575 Kelley Pointe Parkway Suite 200

Edmond, OK 73013 jharrington@fundsforlearning.com

405-431-4140

April 25, 2014

# APPENDIX A Sample Data Transfer API (Form 486)

## **Data Transfer API-Form 486**

This is a proposed API for the purpose of filing forms 486 with USAC. The form is filed as a simple web form post over HTTPS. The specification does not authenticate the person submitting the form as authorized to act on behalf of the applicant. It is assumed that there will exist some sort of form certification mechanism outside of the form submission process that performs that function.

## I. Specification for the Form 486

This API provides the specification for a form 486 in a data structure using JSON syntax. At the top-level of the specification is an object. The object should have the following members:

- formident: the free-form identifier the applicant would like to use to identify the form
- applicantname: the name of the applicant
- ben: the billed entity number of the entity submitting the form
- fy: funding year of the FRNs being specified on the form
- appaddress: the address where the applying entity is located
- appcity: the city where the applying entity is located
- appstate: the two-character abbreviation of the state where the applying entity is located
- appzip: the zip code where the applying entity is located
- appphone: the main phone number at the applicant facility
- appfax: the main fax number at the applicant facility
- appemail: a primary e-mail address that can be used for correspondence with the applicant
- cname: the name of the primary contact person for the form
- caddress: the street address portion of the address for the primary contact person for the form
- ccity: the city portion of the address for the primary contact person for the form
- cstate: the state abbreviation portion of the address for the primary contact person for the form
- czip: the zip code portion of the address for the primary contact person for the form
- cphone: a phone number where the primary contact person for the form can be reached
- cphoneext: the extension, if applicable, where the primary contact person for the form can be reached
- cfax: a fax number where paper correspondence can be sent for the primary contact person for the form
- cemail: an e-mail address that can be used to correspond with the primary contact person for the form
- cpmoc: preferred method of contact for the primary contact person for the form, possible values are 'PHONE', 'FAX', 'EMAIL'
- **b2ai6a**: applicant's selection for block 2, item 6a (true or false)
- b2ai6b: applicant's selection for block 2, item 6b (true or false)
- **b4cert**: the organization that approved the technology plan for the applicant (or 'NONE')
- b4i8: applicant's selection for block 4, item 8 (true or false)
- b4i9: applicant's selection for block 4, item 9 (true or false)
- **b4i10**: applicant's selection for block 4, item 10 (true or false)
- b4i11a: applicant's selection for block 4, item 11a (true or false)
- b4i11b: applicant's selection for block 4, item 11b (true or false)
- **b4i11c**: applicant's selection for block 4, item 11c (true or false)
- b4i11d: applicant's selection for block 4, item 11d (true or false)
- **b4i11e**: applicant's selection for block 4, item 11e (true or false)
- **b4i11f**: applicant's selection for block 4, item 11f (true or false)
- **b4i11g**: applicant's selection for block 4, item 11g (true or false)
- authname: the name of the person authorized to certify the form
- authtitle: the title of the person authorized to certify the form
- authaddress: the street address portion of the address of the person authorized to certify the form
- authcity: the city portion of the address of the person authorized to certify the form
- authstate: the state abbreviation portion of the address of the person authorized to certify the form
- authzip: the zip code portion of the address of the person authorized to certify the form
- authphone: a phone number where the person authorized to certify the form can be reached
- authphoneext: the extension, if applicable, where the person authorized to certify the form can be reached
- authfax: a fax number where paper correspondence can be sent for the person authorized to certify the form
- authemail: an e-mail address that can be used to correspond with the person authorized to certify the form
- authemp: employer of the person authorized to certify the form
- \_Detail: an array of objects providing the detail lines for the form, where each object has the following members
  - 471no: the application number of the form 471 where the funding request is from
  - frn: the funding request number
  - spin: the SPIN from the associated funding request
  - **spname**: the name of the service provider from the associated funding request
  - **ssd**: the date the service from the funding request started or will start

03/27/2014 1/2

## II. Transferring data to USAC via HTTPS transaction

The form 486 data should be transferred to USAC as though it were a simple form post over HTTPS. The URL is to be determined. The form data should contain the following fields:

- 486: the form 486 data specified in part I above, as a string, using JSON syntax.

USAC's system will attempt to validate the data as it processes it. It will provide feedback via HTTPS response in the form of a JSON structure. At the top level will be an object, and the object will have the following members:

- Errors: an array of objects, where each object has a 'code' and a 'message' (will be an empty array if successful)
- Status: the status of the form 486 as it appears on USAC's website as a result of the form submission
- Log: a log number that USAC can use to troubleshoot problems and look up specifics about the form processing

## III. Data validation and possible error messages

Here are the possible error messages ('code' and 'message') and the conditions that generate them:

- 'missingRequiredField': "No <human readable name for field> given." a required field was not provided or was set to 0/blank.
- 'certificationRequired': "Certification in block <block number>, item <item number> is required." applicant did not make a required certification.
- 'invalidEmail': "E-mail address for <form or authorized> contact appears to be invalid." e-mail address does not match against the regular expression used to validate e-mail addresses.
- 'charLimitExceeded': "<human readable name for field> is too long, must be <max number of characters for field> characters or less." length of data field exceeds the maximum set for the field.
- 'invalidCIPAcert': "One and only one certification must be made in Block 4 Items 11a-11e." no CIPA certification was made, or more than one CIPA certification was made. in block 4.
  - 'noLineItems': "No line items/funding requests found on form." Detail array in data structure provided has no elements.
- 'invalid471FRN': "Line item error (<471 number>:<FRN>) Match not found in funding database." invalid 471 number/funding request number combination.
- 'FRNNotFunded': "Line item error (<471 number>:<FRN>) Request has not been funded." funding request specified on the line item has not been funded.
- 'invalidSPIN': "Line item error (<471 number>:<FRN>) SPIN is not correct." invalid SPIN/doesn't match SPIN USAC has on file for the funding request.
- 'invalidSSD': "Line item error (<471 number>:<FRN>) Service start date is not valid." date provided either doesn't match expected format or is not an appropriate calendar date.
- 'earlyFilingNotAllowed': "Line item error (<471 number>:<FRN>) Early filing not allowed or not specified (Block 2, Item 6a)." the date specified for the line item is in the future and block 2 item 6a was not set or checked.
- 'SSD471Mismatch': "Line item error (<471 number>:<FRN>) Date in line item occurs before start of service date on form 471." the date specified for the line item is before the corresponding date specified on the form 471.
- 'SSDAfterSED': "Line item error (<471 number>:<FRN>) Date in line item occurs after service end date (<service end date of funding request>)." the date specified for the line item occurs after the service end date specified for the funding request (if applicable).
- 'SSDAfterCED': "Line item error (<471 number>:<FRN>) Date in line item occurs after contract expiration date (<contract expiration date of funding request>)." the date specified for the line item occurs after the contract expiration date specified for the funding request (if applicable).

# IV. Checking for version/system availability

There will be a URL (yet to be determined) where a system can check the version of the API or simply verify that the system is available. The response will be a string in JSON syntax representing an object, where the only member is 'version' and the value will be the version of the API.

#### **Files**

486Example1.json 1.42 KB 03/26/2014 Brian Guire

03/27/2014 2/2