

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

|                                             |   |                     |
|---------------------------------------------|---|---------------------|
| In the Matter of                            | ) |                     |
|                                             | ) |                     |
| Schools and Libraries Universal Support     | ) | CC Docket No. 02-6  |
| Mechanism                                   | ) |                     |
|                                             | ) |                     |
| Federal-State Joint Board on Universal      | ) | CC Docket No. 96-45 |
| Service                                     | ) |                     |
|                                             | ) |                     |
| Changes to the Board of Directors of the    | ) | CC Docket No. 97-21 |
| National Exchange Carrier Association, Inc. | ) |                     |

**COMMENTS  
CSM CONSULTING, INC.**

**Regarding:**  
**Universal Service-Schools and Libraries Universal Service Program, FCC Forms 470 and 471**  
***OMB Control Number: 3060-0806.***  
**August 20, 2024**

## **Introduction**

CSM, Inc. (“CSM”) is submitting these comments in response to the Commission’s request for comment on the E-Rate FCC Forms 470 and Form 471.

CSM is an E-Rate management firm assisting applicants throughout the country achieve and maintain compliance with the myriad of rules, regulations, timelines, and documentation requirements associated with the Schools and Libraries Program. We have been providing these services as a firm since 2003, though the firm’s principals have been involved in the program since its inception as applicants and coordinators for school districts and county offices of education (also known as educational services agencies). We work with 463 school and library applicants including the Tennessee, California, and Hawaii Departments of Education and both California’s and Illinois’ statewide consortia of schools and libraries. In Funding Year 2024, we filed over 1,900 funding requests totaling close to \$300 million. Our client base consists solely of applicants including consortia and public, private, and charter school systems ranging from 21 to more than 200,000 students as well as individual libraries and library systems.

In these comments, CSM will focus on the FCC Form 471 and the different sections, or modules, within the E-Rate Productivity Center (“EPC”) where applicants report information that is then drawn into the certified FCC Form 471. Each of our suggestions is based on real-life situations where the current reporting structure of EPC and the FCC Form 471 is inadequate to reflect the conditions faced by applicants and service providers and thus leads to burdensome complexity and onerous effort on behalf of applicants, service providers, USAC and the Commission in addressing scenarios that just don’t ‘fit’ into the current platform or processes.

CSM provides comments on the following Form 471 topics:

- 1. The Contract module should be editable to allow for addition of information, documents, and amendments to original contract records created by the applicant**
- 2. The Entity address drawn in to the FCC Form 471 Funding Request Number Recipients of Service should be modified to allow optional service delivery address**
- 3. Use Bandwidth Minimum and Maximum Fields to Address Transition of Services**

**The EPC Contract Module Should be Editable to Allow for Addition of Information and Documents by the Applicant**

Contract records, created by the applicant in the Contract Module within EPC, contain key information related to the FCC Form 470 competitive bidding process, awarded service provider, and contract terms. The EPC system is designed to import data from the contract record directly into the Funding Request Number (“FRN”), Funding Request Key Information, Associate a Contract function of the FCC Form 471.

Image 1: Associate a Contract Function within a FCC Form 471 Funding Request

FCC Form 471 - Funding Year 2024

School District 10977 (BEN: 10385) - test - Form # 241000156

Last Saved: 8/15/2024 11:18 AM EDT

Basic Information

Entity Information

Funding Requests

Certify

Next, you will associate a contract to your FRN. Please search for a contract below and select one to associate it to the FRN.

▼ Associate a Contract

Search by Creating Organization BEN

10385

Please note that BEN is a required field and you can use other search fields to narrow down your result.

Search by Contract ID

Search by Nickname (All or Partial)

Search by Contract No.

CLEAR FILTERS

SEARCH

| <input type="checkbox"/> | Contract ID | Contract Number | Nickname            | Award Date | Creating Organization BEN |
|--------------------------|-------------|-----------------|---------------------|------------|---------------------------|
| <input type="checkbox"/> | 8974        |                 | Category 2 Contract | 1/15/2024  | 10385                     |
| <input type="checkbox"/> | 8975        |                 | Category 2 Contract | 1/15/2024  | 10385                     |
| <input type="checkbox"/> | 7507        |                 | Test Contract #1    | 1/11/2023  | 10385                     |
| <input type="checkbox"/> | 7508        |                 | WAN Contract        | 1/11/2023  | 10385                     |
| <input type="checkbox"/> | 7509        |                 | ISP 2023            | 1/11/2023  | 10385                     |

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Source: USAC’s interactive EPC Training Website

There is an enhancement which can be added to EPC which would drastically streamline the reporting of contracts, eliminate redundancy, reduce Program Integrity Assurance (“PIA reviews”), and eliminate confusion which results in additional appeals to USAC and to the FCC. The enhancement is to make the contract record editable to add contract amendments, voluntary extensions, and other contract-related documents.

Contracts are not static. They change frequently during the term of the contract. Sites are added or removed by amendment, voluntary extensions are authorized, bandwidth changes are incorporated, and contract end dates may be adjusted due to delayed implementation of services. Rarely do contracts remain unchanged over the full duration of the contract. It would be far better for there to be a single primary contract record number where the applicant and/or PIA review may attach all related documents as the contract evolves over time, than the current process which requires the creation of a new contract record every time there is a change.

Currently, if an applicant makes a change to a contract, or makes a mistake forgetting to add all contract documents to a contract record in EPC, they must create a brand-new contract record, with the new documents, amendments, etc. In many instances, USAC PIA review - not the applicant - will create new contract records if they identify a deficiency in the reporting of the original contract. The original applicant-created contract record does not go away or get updated. Rather, there are now multiple records for the same contract. A five-year contract could have several different contract records, each with their own EPC assigned contract ID over the course of the contract. This adds complexity and confusion to program applicants and USAC PIA reviewers.

Applicants are often faced with a choice - to create new contract records with the new data as the contract evolves - or to utilize the existing contract record unchanged. Because of the added steps, many applicants choose not to create a new contract record and will instead cite the original contract record. This unnecessarily burdens USAC PIA reviewers to verify any new contract changes as part of the review process and results in unnecessary additional applicant outreach.

**Example**

The applicant signs a contract for three years, with two 1-year voluntary extensions, for a total contract length of 5 years. Assuming no other changes to the contract and under the current process, the applicant will create 3 contract records: 1 original for the main contract of 3 years, and new contract records for the notarized voluntary extensions each for years 4 and 5. It would be far better for there to be a single contract record with the main contract, and all subsequent amendments.

If the contract module were modified to be editable and add the voluntary extensions, PIA review could pass the contract extension without additional outreach to applicants. This will streamline the PIA review.

This is the simplest contract modification. It grows exponentially more complex when you add bandwidth changes, changes to the site list (adds, moves, deletes), etc.—not all of which happen at the same time. During the annual FCC Form 471 application process, it makes sense to add all contract modifications to the primary contract record at the same time in advance of filing the FCC Form 471 for that year than it does to create brand-new contract records for the contract and amendments with all original and new amendments.

CSM believes that changing the contract module to editable fields and to allow for the addition of new contract documents and amendments will streamline and simplify the program administration process.

### **Entity Physical Address Versus Service Delivery Address**

Within EPC, an entity has one physical address. This is reported under the entity's profile page within EPC and then is imported into the FCC Form 471 as a "recipient of service" on a funding request under the FRN Line Items section.

Image 2: Entity Record within EPC

## #91 - FCC School District 1 School A



MANAGE ORGANIZATION

MANAGE ANNEXES

Summary

Additional Information

Contracts

FCC Forms

News

Related Actions

## Organization Details

**Name** FCC School District 1 School A  
**Entity Number** 91  
**FCC Registration Number**

**Applicant Type** School  
**Status** Active

## Contact Information

**Physical Address** 123 Any Street, Suite 200  
Washington, DC 20036  
DC

**Mailing Address** 123 Any Street, Suite 200  
Washington, DC 20036  
DC

**Phone Number** 555-555-1212  
**Email** FCCSchoolDistrict1.SchoolA@mailinator.com  
**Website URL**

Source: USAC's interactive EPC Training Website

However, it is common that an entity has both an official entity address and a separate Category One broadband service delivery address. Usually this occurs when the Main Point of Entry for a Category One service is not located at the official address because service is delivered to a building on the corner of two or more cross streets, and the circuit enters the building from a side street. For E-Rate purposes, the address reported in its EPC profile is the entity's official address which USAC verifies via third party resources such as each State's Department of Education or State Librarian. However, for invoicing purposes, many service providers use the service delivery address where the circuit is physically delivered into the building. Consequently, the mismatch between the reported physical address and the service delivery address on service provider invoices has led to numerous instances of invoices being rejected by USAC PIA review, leading to funding loss, even though the entity receiving the service is the eligible entity of record.

Furthermore, during audits, auditors often declare a finding for an address that does not match the Physical Address reported in EPC. It often takes applicants submitting maps identifying both the physical and service delivery addresses with cross streets to satisfy the audit finding.

This issue can be fixed one of three ways: by adding fields on the entity page in EPC to allow for the entry of a service delivery address which will then be drawn into the FCC Form 471 funding request for that year – or - requiring service providers to invoice to the applicant entity physical address and not the service delivery address – or - requiring auditors and USAC PIA invoicing review to accommodate the service delivery address without audit exception or rejection of the invoice.

Previously, PIA review has recommended calling the service delivery address an annex as a temporary fix. However, a service delivery address does not accurately meet the definition of an annex, which is, separation of a public right-of-way.<sup>1</sup> A single school or library entity can, in fact, have two separate but concurrent addresses on a single campus not separated by a right-of-way.

CSM believes that adding the additional field or fields for service delivery address under the entity record in EPC will reduce the number of invoice denials and false audit findings for an improper entity on FCC Form 471 and subsequently reduce the number of appeals to USAC and to the FCC.

### **Use Bandwidth Minimum and Maximum Fields to Address Transition of Services**

One of the most difficult processes to manage in E-Rate is the transition of Category One services during the funding year—whether it is at the end of a contract transitioning to a new contract between two service providers, or bandwidth changes within either the same contract or a new contract under the same provider. Delivery implementation rarely occurs on the first day of the funding year, July 1. Indeed, nearly all transition of services happen on dates other than July 1, requiring post commitment changes such as split funding requests via the operational

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<sup>1</sup> <https://apps.usac.org/sl/tools/news-briefs/preview.aspx?id=670>

SPIN change mechanism, bandwidth changes by service substitutions, additional forms to be filed (FCC Form 486) and invoicing denials and resubmissions—all of which add to the administrative burden on the applicants, service providers, and program administrators.

Within the last year, in response to comments on audits, USAC has changed its invoicing procedures to require the bandwidth on the approved FCC Form 471 funding request match the invoice, which sounds like an easy and noble goal, but is fraught with pitfalls. Service providers invoice at the bandwidth they have provided. However, many applicants request the bandwidth on their FCC Form 471 FRN Line Items to be what they expect to upgrade to over the course of the funding year, not knowing when the upgrade will be completed at the time they certify their FCC Forms 471 many months in advance of when such an upgrade may occur. An applicant upgrading from a 1 Gbps connection to a 5 Gbps connection will request the 5 Gbps connection bandwidth and pricing on its FCC Form 471 funding request since they do not know when the service will be transitioned by the service provider. In the Funding Request Number narrative they will indicate that the bandwidth will be increased for the site during the funding year.

However, when FCC Form 472 or 474 invoicing occurs, invoices are currently being rejected because the bandwidth on the approved FCC Form 471 does not match the invoiced bandwidth. The applicant must file a service substitution in EPC by the June 30 service delivery deadline to change the bandwidth from what they requested on the FCC Form 471 back to the bandwidth the provider was supplying prior to the upgrade. Under the new invoicing procedures implemented at the program administrator, a split funding request resulting in at least one additional new FRN is needed.

USAC is not consistent with how it creates the additional split funding request. Sometimes it defines the requested service or ending bandwidth as the first funding request and then creates

the second funding request using the months of service for the starting bandwidth. Other times, the process is reversed. The only way to figure out which funding requests are for the starting bandwidth, and which are for the ending bandwidth, is to open the funding requests in EPC and look at the months of service and bandwidth speeds. This often results in service providers invoicing for the incorrect service under the incorrect FRN.

Additionally, the split funding request creates a requirement for a new FCC Form 486 for the new FRN. It does not take the Form 486 status from the original FRN and as a result, applicants are often unaware that they must create and certify the FCC Form 486, potentially resulting in reduced funding, or invoice delays. This results in invoice denials and rejections, greatly increasing the administrative burden on the program.

USAC's use of bandwidth as an invoice denial reason is contrary to the original intent of the inclusion of bandwidth on the E-Rate Form 471 application. The original intent and reason bandwidth was added to the FCC Form 471 was because the data collected feeds into the National Broadband Map. Furthermore, the Office of Management and Budget and the Department of Education NCES statistics uses this data to define "the percentage of schools connected to the internet," and later, "the percentage of classrooms connected to the internet" which for years was included in President's State of the Union address. It was intended as an informational item to inform data collection, not as an audit finding for improper payments-- which is what this data collection has morphed into.

Here are two real life examples of the extra hoops applicants now must go through to match up invoices with the bandwidth.

**Example #1: Internet Service Provider (“ISP”) service upgrade from 10 Gbps to 40 Gbps mid-year with Same Provider**

The applicant school district signed a contract to upgrade the service at its data centers to increase bandwidth from 10 Gbps to 40 Gbps. The FCC Form 471 application for the year anticipated the increase during the funding year to 40 Gbps and the request was made at 40 Gbps on the FRN line item effective July 1. The FRN was approved at 40 Gbps. The service provider completed the upgrade on April 1 of the funding year, 3 months before the end of the funding year. The service provider submitted a FCC Form 474 Service Provider Invoice (“SPI”) for the first 6 months of service, but the invoice was rejected because the bandwidth on the FCC Form 471 was approved at 40 Gbps and the bandwidth on the invoices was 10 Gbps. The applicant filed a service substitution for the 9 months of service which resulted in the creation of a new FRN for 3 months of service. The applicant filed a new FCC Form 486 for the new FRN, and the service provider then submitted 2 additional SPI invoices—one invoice for 10 Gbps of service for 9 months on the original FRN and a second SPI invoice for 40 Gbps of service at 3 months on the new FRN. These invoices were successfully paid.

Under the previous procedures, the original invoice would likely have been paid because the applicant had indicated transition year services and the price of the bandwidth on the invoice was less than the price of the upgraded service. The new process went from a 1–step process to a 7- step process and added multiple months to the payment cycle: total delay of 3 months.

**Example #2: Wide Area Network (“WAN”) service upgrade for a single connection from 200 Mbps to 500 Mbps -- mid-year- with Same Provider**

The applicant school district has a contract which allows the bandwidth services to be increased or decreased within the ‘matrix of bandwidths.’ Annually, the applicant signs an amendment to update the bandwidth for any sites planning to upgrade during the funding year. During the year, the service provider upgrades the bandwidth as its schedule allows. Once the bandwidth is upgraded, the provider starts charging the new rate. One FCC Form 471 funding request had 19 individual school sites. A single school site on this contract was upgraded from 200 Mbps to 500 Mbps, and the upgrade was completed May 1, two months before the end of the funding year. The SPI invoice for the 19 sites was rejected for bandwidth mismatch associated with the single upgraded site. The applicant was instructed by USAC customer service to file a service substitution. As part of the substitution, the applicant attempted to split the line items for the 200 Mbps bandwidth to allow for the bandwidth change for the single site. That change was rejected by USAC. Instead, USAC removed the upgraded site from the original funding request and created two new funding requests with the single site—one for 10 months of service at 200 Mbps and one for 2 months of service at 500 Mbps. A new FCC Form 486 for the 2 FRNs was needed, and the service provider did not update their records for the new FRNs, resulting in the next invoice being short paid. The service provider resubmitted the invoice with only the new entity and the two new funding requests and were successfully paid.

What originally would have been a 1- step process SPI invoice process, ended up becoming a 15-step process to correct. The invoicing process was delayed approximately 4 months and the service provider had to submit 4 separate SPI invoice line items to fix the problem. The applicant needed to file a service substitution, a new FCC Form 486,

and request USAC to split the funding request, resulting in a vastly complex process far in excess of what was previously required.

## Discussion

We at CSM propose a solution to the Bandwidth issue on the FCC Form 471. On the Funding Request Line Item screen, there are several items under “Connection Information” including the following:

- Does this include firewall services? (Y/N)
- Is this a direct connection to a single school, library or a NIF for Internet access? (Y/N)
- Is this a connection between eligible schools, libraries and NIFs (i.e., a connection that provides a “Wide area network”)? (Y/N)

**We propose adding a fourth bullet point:**

- **Is this FRN Transitioning Service (between contracts, bandwidth upgrades, or service providers) (Y/N)**

**If YES, there should be 2 new fillable fields**

- **Starting Bandwidth (expected bandwidth at the start of the funding year)**
- **Ending Bandwidth (expected bandwidth at the end of the funding year)**

Image 3: FCC Form 471 Funding Request Line Items Data Entry Screen in EPC

## FCC Form 471 - Funding Year 2024

School District 10977 (BEN: 10385) - test - Form # 241000156

Last Saved: 8/19/2024 10:35 AM EDT

| Basic Information                                                                                                                                                                            | Entity Information | Funding Requests                                                     | Certify |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|----------------------------------------------------------------------|---------|
| Please enter Connection Information for this Data Transmission and/or Internet Access Line Item                                                                                              |                    |                                                                      |         |
| <b>Connection Information for new FRN Line Item for FRN #2499000146 - Broadband</b>                                                                                                          |                    |                                                                      |         |
| Is this a direct connection to a single school, library or a NIF for Internet access? ⓘ*                                                                                                     |                    | Does this include firewall services? *                               |         |
| <small>Note: If the request is for direct connections, you will be required to allocate the total number of lines (monthly quantity) among the recipients listed for this line item.</small> |                    |                                                                      |         |
| <input type="button" value="YES"/> <input type="button" value="NO"/>                                                                                                                         |                    | <input type="button" value="YES"/> <input type="button" value="NO"/> |         |
| Is this a connection between eligible schools, libraries and NIFs (i.e., a connection that provides a "Wide area network")? ⓘ*                                                               |                    |                                                                      |         |
| <input type="button" value="YES"/> <input type="button" value="NO"/>                                                                                                                         |                    |                                                                      |         |
|                                                                                                                                                                                              |                    | Space for suggested changes to be captured.                          |         |
| <b>FCC Form 471 Help</b>                                                                                                                                                                     |                    |                                                                      |         |
| <a href="#">Show Help</a>                                                                                                                                                                    |                    |                                                                      |         |
| <input type="button" value="BACK"/> <input type="button" value="CANCEL"/>                                                                                                                    |                    |                                                                      |         |

Source: USAC's interactive EPC Training Website

Identifying the Transition service starting and ending bandwidth would solve the problem much later in invoicing. The bandwidth on the invoice would match either the starting bandwidth or the ending bandwidth on the FCC Form 471 FRN. This single action on the FCC Form 471 would eliminate the need for the following actions in post commitment for services in transition:

1. Service Substitution
2. Split funding request via an Operational SPIN Change
3. Additional FCC Form 486 for the new FRN
4. Multiple invoice submissions

Furthermore, it would reduce invoice processing as the services would match up with either the starting or ending bandwidth. Fewer invoice denials lead to fewer resubmitted invoices, fewer appeals to USAC, and fewer appeals to the FCC. Finally, it would reduce BCAP audit findings for invoicing improper bandwidth.

Both the changes to the contract module to allow new attachments and the Minimum and Maximum Bandwidth fields on the FCC Form 471 can help address another persistently tricky problem—the transition of services between two different service providers.

Currently, there is no good mechanism in the E-Rate program to address Transition of Services. If an applicant requests the expiring service provider at the old contract amount on the FCC Form 471 Funding Request, and the new bandwidth and service are higher priced with the new service provider, the applicant creates a ‘donut hole’ of coverage where the monthly costs of the old contract do not cover the costs of the new contract. If an applicant requests the higher dollar figure, but doesn’t have the correct contract documents attached, PIA review must request and verify the contract documents. If the applicant requests the new contract and service and the implementation is delayed, then the original service provider is unable to invoice USAC for many months, often resulting in applicant accounts being sent to collections for non-payment. In short, there are few optimal solutions for the Transition of Services.

CSM proposes that the best way to handle transition of services between two different vendors on two different contracts is a hybrid approach using two changes outlined in these comments—modifying the expiring contract module and using the minimum and maximum bandwidths on the FCC Form 471.

1. The applicant modifies the expiring service provider contract module and adds the new service provider’s contract as an attachment. This new contract document is marked **TRANSITION**.
2. On the FCC Form 471 funding request, the narrative includes the words, **TRANSITION** and the expiring bandwidth is placed in the Minimum bandwidth field and the new bandwidth for the new contract is placed in the Maximum bandwidth field.

3. The contract module used in the transition is the expiring contract. The service provider listed is the expiring service provider.
4. The monthly line-item cost is the highest cost of either the old or new contract. PIA review can look in the contract module, see both contracts, and verify the pricing without outreach to applicants.
5. The FCDL is issued. The FCC Form 486 is certified and the original service provider continues to invoice.
6. The applicant agrees in writing that the cutover to the new service has been completed. The applicant creates a new contract record for the new service and attaches the new contract. The applicant files an operational SPIN change to split the funding request for the months of service for the old and new contracts and attaches the email confirming the cutover date. USAC Post Commitment creates the new FRN, assigns it to the new contract, and issues the Revised Funding Commitment Decision Letter (RFCDL).
7. Applicant files the FCC Form 486 for the new FRN.
8. The new service provider begins to invoice from the date of the cutover.

As further evidence of why these changes are needed to streamline the program and promote a successful and less burdensome process for applicants, listed below is a real-world example of delayed transition of services and the impact on a service provider.

### **Example #3 Transition of Services Between 2 Service Providers**

The applicant conducted a competitive bidding process for Wide Area Network (“WAN”) services and awarded the contract to a new service provider, with an expected service start date

of July 1 to coincide with the start of the funding year. As the new service was a bandwidth increase and a price increase, the applicant created a contract module for the new service under the transition year guidance and referenced the new contract, new provider, and new pricing. Through a series of construction delays, the new service was not ready on July 1—the service provider completed their work in May of the following year, 11 months after the start of service for that funding year. Because the new service provider was listed on the FCC Form 471 funding request, the old service provider was unable to invoice USAC for 11 months, despite continuing to provide service to the district. The applicant paid the applicant share to the original service provider; however, they were delayed receiving payment for tens of thousands of dollars until the applicant could file an Operational SPIN change with USAC to request a split funding request.

Had CSM's new proposed solution for transfer of service between different service providers (above) been in place, none of the delay would have occurred. The expiring service provider would have been able to invoice as soon as their internal processes allowed, while the new service provider built out the infrastructure. Invoices would not have been delayed 11 months. The savings to the program by having a defined process for the applicants and service providers to follow regarding the transfer of services eliminates much of the confusion and uncertainty in the current process and that guidance will greatly streamline program administration behind the scenes.

## **Summary**

In short, the best way to streamline the FCC Form 471 process is to make a few minor changes to how data is reported in EPC: 1) Make contract records editable; 2) Allow for the addition of the service delivery address, and 3) add the fields for minimum and maximum bandwidth to the FRN line-item screen. While the changes will require some coding enhancements behind the scenes,

notably to the Open Data tool and print preview functions, and updates to procedures, CSM feels that the benefits of streamlining the program administration outweigh the staff cost to implement the changes. We cannot emphasize enough how much these changes would improve the applicant and service provider experience and would support the goal of a more streamlined and less burdensome process for all stakeholders involved, including USAC and the FCC.

CSM thanks the Commission and the Bureau for the opportunity to submit these comments and suggestions to help make the E-Rate program more effective, efficient, streamlined and simplified for all constituents and we welcome an opportunity to discuss these and other ideas at your convenience.

Warmest Regards,

/s/

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