

E-rate Program Tribal Training

Eligible Services and Fiber Updates

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Albuquerque • Minneapolis • Los Angeles • Portland

Overview

- Category One
- Category Two
- Fiber Updates

Eligible Services and Fiber Updates

Category One

What is Included in Category One?

- Category One primarily supports broadband connectivity to schools and libraries.
- Category One also supports voice service which is subject to a phase down of support as of FY2015.
- This includes broadband connections to eligible locations that:
 - Connect multiple points
 - Connect eligible locations to the Internet
 - Services that provide basic conduit access to the Internet.

Eligible Data Transmission Services and Internet Access

- Some examples include:
 - Fiber (Lit and Dark)
 - Self-Provisioned Fiber
 - Wireless Service (e.g. microwave)
 - Satellite Services
 - DS-1, DS-2, DS-3
 - Ethernet
 - T-1, T-3, Fractional T-1
 - Cable Modem
 - DSL
 - ISDN
 - MPLS

Eligibility Limitations of Data Plans

- Data plans and air cards for mobile devices are eligible only:
 - If you can demonstrate that individual data plans are the most cost-effective option for providing internal broadband access for mobile devices OR
 - Installing a Wireless Local Area Network (WLAN) is not physically possible.
- Seeking support for data plans or air cards for mobile devices for use in a school or library with an existing broadband connection and WLAN implicates the E-rate program's prohibition on requests for duplicative services.

Eligibility Limitations for Firewall

- Firewall protection provided by a vendor other than the Internet access provider OR priced separately is considered Internal Connections.

Voice Services

- Starting with FY 2015, Voice Services are subject to a 20% reduction each year continuing until FY 2019 when all voice services are phased out.
- For FY 2016, the reduction to Voice Services is 40%.

Discount %	FY2015 -20%	FY2016 -40%	FY2017 -60%	FY2018 -80%	FY2019 -100%
90	70	50	30	10	0
80	60	40	20	0	0
70	50	30	10	0	0
60	40	20	0	0	0
50	30	10	0	0	0
40	20	0	0	0	0
30	10	0	0	0	0
25	5	0	0	0	0
20	0	0	0	0	0

Eligible Services and Fiber Updates

Category Two

What is Included in Category Two?

- Category Two includes equipment and services needed to bring broadband into and throughout schools and libraries.
- Subject to five-year budgets for schools and libraries.
- Category Two includes internal connections, basic maintenance of internal connections and managed internal broadband service.

Eligible Internal Connections

- Access points
- Cabling
- Caching
- Firewalls
- Switches
- Routers
- Racks
- UPS
- Wireless LAN Controllers
- Improvements, upgrades and software necessary to support eligible broadband internal connections components
- As part of the E-rate Modernization Order, broadband distribution services and equipment that can be virtualized in the cloud are eligible.

Managed Internal Broadband Services (e.g. Managed Wi-Fi)

- Services provided by a third party
 - Operation
 - Management
 - And/or monitoring of eligible broadband internal connection components
- The third party may manage the school or library's equipment or provide the equipment as part of a lease.

Basic Maintenance of Internal Connections

- Support for basic maintenance of eligible internal connections such as:
 - Repair and upkeep of hardware
 - Wire and cable maintenance
 - Basic tech support
 - Configuration changes
- Support for BMIC is limited to actual work performed under the contract.

Basic Maintenance of Internal Connections

- Basic maintenance does not include
 - Services that maintain ineligible equipment
 - Upfront estimates that cover the full cost of every piece of eligible equipment
 - Services that enhance the utility of equipment
 - Network management services, including 24-hr network monitoring
 - On-site technical support
 - Unbundled warranties
- Note: Operations and management of eligible equipment is not supported as BMIC but is eligible as Managed Internal Broadband Services.

Eligible Services and Fiber Updates

Fiber Updates

Overview

- Emphasis on providing additional flexibility for schools and libraries seeking high-speed broadband connections.
- Lack of access to broadband, especially in rural areas, and high cost of those services are major obstacles in meeting program goals.
- Order designed to help close the rural connectivity gap and increase affordability of high-speed broadband connections.
- Everything discussed today will be in effect from FY 2016 forward.

What's New?

- New Options for E-rate funded special construction for new fiber.
 - Cost of deploying new fiber (as opposed to ongoing cost of leasing or maintaining/operating fiber.)
 - Provides up-front capital that will reduce monthly recurring cost to applicants.
 - Previously available for lit services.
 - Now also available for dark fiber and self-provisioned fiber.

What Stays the Same?

- Regardless of the services sought (including new fiber options), E-rate rules continue to require that applicants:
 - Conduct fair and open competitive bidding process.
 - Selecting the most cost-effective bid.

Amortization of Up Front Special Construction Costs

Old Requirement

- Applicants had to amortize large, up-front construction costs in excess of \$500,000 over three years.

New Requirement

- E-rate will now pay the full discounted share of up-front special construction charges in the first year.

Installment Payments for Special Construction Costs

Previous Requirement:

- Applicants had to pay their share of non-recurring cost of special construction within 90 days of the start of service.

E-rate will now allow:

- Applicants are allowed to pay their share of those up-front costs in installment payments over up to four years.

Installment Payment Plan of Up Front Special Construction Costs

- Applicants interested in an installment payment plan option must indicate their interest on FCC form 470
- Service providers are under no obligation to offer such installment payment options to applicants.

Special Construction Projects

- Applicants can receive funding for Category One special construction costs incurred up to six months prior to start of funding year.
 - Occurs after selection of service provider via FCC Form 470
 - Actual service start date is on or after July 1 the funding year.
 - Can get one year extension due to unavoidable delays.

Equalizing Dark and Lit Fiber

- Beginning FY 2016, funding for lit and dark fiber has been equalized.
- Dark fiber leases allow the purchase of capacity separate from the service of lighting the fiber.

Equalizing Dark and Lit Fiber

Old Dark Fiber Rule

- E-rate would only pay special construction costs up to the applicant's property line.
- Modulating electronics not eligible in Category One.

New Dark Fiber Rule

- E-rate will now pay special construction costs beyond the applicant's property line.
- Modulating electronics to light dark fiber will be eligible for category one support.

Requirement to Compare Dark and Lit Fiber

- Applicants that seek bids for dark fiber must also seek bids for lit fiber service.
- Before selecting a dark fiber solution, applicants must fairly compare dark fiber with other available options to ensure the most cost effective option is chosen.

Requirement to Compare Dark and Lit Fiber (continued)

- To the extent an applicant intends to seek support for equipment and maintenance costs associated with lighting newly leased or purchased dark fiber, the request for support for those services must be included in the same application with the dark fiber lease.
- Applicants will not receive support for excess capacity and may only receive special construction support for dark fiber lit in the same funding year.

Self-Construction of High-Speed Broadband Networks

- Applicants may seek E-rate support for self-construction of their own high-speed broadband networks, or portions of such networks, when self-construction is the most cost-effective solution.
 - Applications for self-provisioned networks should reflect the total cost of ownership, including special construction, equipment, and maintenance and operation.

Self-Provisioned Fiber Networks

- Requirements:
 - Applicants soliciting bids for a self-provisioned network must also seek bids for lit service on the same FCC Form 470, unless the applicant already posted for broadband services for this same funding year and received no bids.
 - Applicants must compare the cost of lit fiber service to the total cost of ownership over the life of the facility for self-provision option.
 - Applicants seeking dark fiber or self-provisioning must upload an RFP in new the FCC Form 470 system.

Guidance on RFPs

- Be as specific as possible to enable a meaningful comparison of lit, dark, and self-provisioned options.
- Include estimated bandwidth sought. Terms such as “as needed” or “district-wide” are not sufficient descriptions of the quantity or capacity of the products and services requested. Applicants may identify a range, such as 100-200 Mbps.
- Include expected growth rate in bandwidth demand over the relevant time period and seek pricing for the increased level of bandwidth over time.

Guidance on RFPs

- Include any state or local procurement requirements.
- RFPs must be available for at least 28 days.
- Fiber RFPs take time to write.
- Potential bidders need more time to respond to these bids.
- Start early!

Competitive Bidding Considerations

Old Rule

- Applicants must conduct fair and open competitive bidding process.
- Applicants had to select the most cost-effective service provider.
- Price of eligible products and services must be the most heavily weighted bid eval factor

New Rule

- Applicants must conduct fair and open competitive bidding process.
- Applicants had to select the most cost-effective service provider.
- Price of eligible products and services must be the most heavily weighted bid eval factor

Competitive Bidding Considerations

- Comparing different fiber options:
 - Determine a reasonable, defensible period of time for the comparison, based on their anticipated use of the assets. Applicants that choose to self-provision or purchase the equipment required to operate a dark fiber IRU may expect to recover their costs in 5, 7, 10, or even 20 years.
 - Identify a comprehensive and specific total cost for each option.

Competitive Bidding Considerations

- Comparing different fiber options:
 - Applicants must be prepared to explain their assumptions, such as expected useful life.
 - Divide total cost of IRU or self-provisioned fiber by number of years to determine annual cost.
 - Compare to annual lit fiber charge.
- Applicants cannot resell service.
- Applicants must secure access to necessary resources.

Cost Effectiveness

- USAC will focus on verifying the cost effectiveness analysis explained above in the bid evaluation phase.
- When applicants add up the total anticipated costs over a reasonable, defensible time period, the most cost effective option will be clear in most cases.

Cost Allocation

- For shared or multi-purpose fiber build projects, costs necessary to get the fiber to the school or library are eligible.
 - E-rate will not fund capacity beyond what the applicant needs in that funding year. Applicants may not seek E-rate funding for fiber that the applicant is not using.
 - *Example:* Applicant needs 12 strands of fiber. Construction is for 96 strands. If no plans for other customers, only remove cost for 84 additional strands, but all other special construction costs would be fully eligible.

Additional Matching Funds for Fiber Builds

- Providing an incentive for state support of last-mile broadband facilities.
 - E-rate match of up to 10% of the cost of construction will be provided to match state funding for special construction charges for high-speed broadband connections.
 - E-rate match also provided for Tribal schools and libraries when matched by state, Tribal government, or federal agency.

QUESTIONS?

Thank you!