

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

In the Matter of )  
 )  
Modernizing the E-rate ) WC Docket No. 13-184  
Program for Schools and Libraries )

**COMMENTS OF THE ILLINOIS DEPARTMENT OF INNOVATION AND TECHNOLOGY, A  
STATE AGENCY OF ILLINOIS REGARDING FUNDING YEAR 2017 PROPOSED ELIGIBLE  
SERVICES LIST FOR THE E-RATE PROGRAM**

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**Date: July 1, 2016**

Illinois Department of Innovation and Technology (DoIT), a state agency of Illinois submits the following comments in response to the FCC 2017 Proposed Eligible Services List Notice for the E-rate Program for Schools and Libraries.

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## 1 Introduction

The Illinois Department of Innovation and Technology (DoIT), a state agency of Illinois, welcomes the opportunity to respond to the Proposed Eligible Services List for E-rate funding year 2017.

The comments given in this response reflect the views of DoIT. DoIT manages the Illinois Century Network (ICN) the state network in Illinois providing high speed broadband to over 4000 community anchor institutions including K-12 schools and libraries.

We are providing comments in four areas (i) special construction for dark fiber lease or Indefeasible Right of Use (ii) distributed denial of service mitigation (iii) redundant connections and (iv) content filtering.

## 2 Contact Information

To discuss any aspect of these comments in further detail, please contact

Essam El-Beik  
Illinois Century Network  
Illinois Department of Innovation and Technology

120 W. Jefferson Street,  
Springfield, IL 62702

Tel: 214 792 9866

Email: [essam.el-beik@illinois.gov](mailto:essam.el-beik@illinois.gov)

## 3 Special Construction Classification for Dark Fiber Lease/Indefeasible Right of Use

### 3.1 Background

It was clarified in the 2016 Eligible Services List for E-rate that only actual construction of network, including engineering, design and project management, is classified as special construction. During a project it may arise that fiber is available for lease or Indefeasible Right of Use (IRU) rather than construction, and this may not have been known during the project estimation phase. We would like a mechanism that allows to switch from construction of a segment to lease/IRU without a negative impact to the service provider or the applicant (in the case of self-provisioned networks).

We recommend that dark fiber obtained via lease or IRU as part of a special construction project, with the goal of reducing the overall construction cost, be classified as special construction. Otherwise, projects may be deterred from obtaining available dark fiber during a construction project, because there would be no means to recover the cost of the dark fiber lease or IRU. This is because the original funding request would not have accounted for the cost of the dark fiber lease or IRU.

This recommendation applies for both service provider and applicant led construction projects.

### 3.2 Recommendation

We recommend that dark fiber obtained via lease or IRU as part of a construction project, with the goal of reducing the overall construction cost, be classified as special construction.

## 4 Distributed Denial of Service Mitigation

### 4.1 Background

Distributed denial of service (DDOS) mitigation protects both the provider backbone network and the customer network. We consider this service as essential to maintain the integrity of the network and all attached customer networks. DDOS attacks are a frequent occurrence and mitigation is best implemented via a multi-pronged approach that includes protections in the upstream service provider network, the provider backbone network and the customer network.

We view DDOS mitigation as an essential component to providing basic broadband service and to protect the integrity of the network for all our customers and thus strongly recommend this be an eligible service.

### 4.2 Recommendation

We request that DDOS mitigation service be treated the same as firewall protection. Thus, if DDOS mitigation is provided as a standard component of a vendor's Internet access service, then it is considered category 1. If DDOS mitigation is provided by a vendor other than the Internet access provider or priced out separately, it would be considered a category 2 internal connections component.

#### 4.2.1 Proposed Update

We recommend the following update to the section "Eligibility explanations for certain Category One and Category Two services".

**Internet access** – Eligible Internet access may include features such as basic firewall protection, distributed denial of service (DDOS) mitigation, domain name service, and dynamic host configuration when these features are provided as a standard component of a vendor's Internet access service. Firewall protection or DDOS mitigation that is provided by a vendor other than the Internet access provider or priced out separately will be considered a Category Two internal connections component. Examples of items that are ineligible components of Internet access include applications, content, e-mail, and end-user devices and equipment such as computers, laptops, and tablets.

## 5 Redundant Connections

### 5.1 Background

With the increasing use of broadband to provide essential services, for example next generation emergency services, it is becoming table stakes for schools and libraries to have a highly reliable connection to the Internet. This is typically effected by a redundant connection providing geographic diversity and/or service provider redundancy.

### 5.2 Recommendation

We recommend supporting redundant connections as an eligible category 1 service. This includes both redundant WAN connections and redundant connections to the Internet. The redundant connection architecture may consist of a separate connection or a ring based solution.

## 6 Content Filtering

### 6.1 Background

For schools and libraries in the E-rate program, Content Filtering is a necessary component to providing basic broadband service and we strongly recommend this be an eligible service.

### 6.2 Recommendation

We request that Content Filtering service be treated the same as firewall protection. Thus, if Content Filtering is provided as a standard component of a vendor's Internet access service, then it is considered category 1. If Content Filtering is provided by a vendor other than the Internet access provider or priced out separately, it would be considered a category 2 internal connections component.

### 6.3 Proposed Update

We recommend the following update to the section "Eligibility explanations for certain Category One and Category Two services".

**Internet access** – Eligible Internet access may include features such as basic firewall protection, distributed denial of service (DDOS) mitigation, content filtering, domain name service, and dynamic host configuration when these features are provided as a standard component of a vendor's Internet access service. Firewall protection, DDOS mitigation or content filtering that is provided by a vendor other than the Internet access provider or priced out separately will be considered a Category Two internal connections component. Examples of items that are ineligible components of Internet access include applications, content, e-mail, and end-user devices and equipment such as computers, laptops, and tablets.

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