K-12 SCHOOL TECHNOLOGY INITIATIVE COMMITTEE
MEETING MINUTES

Meeting Date	July 27, 2017
Meeting Location	Division of Technology 4430 Broad River Road, Columbia, SC 29210
Facilitator	Keith Osman
Note Taker	Gay Hoyer
Attendees	Andrew Epting (Admin), Karen Rumfelt (Admin), Petra Turner (Admin), Melanie Barton (EOC), Bobbi Kennedy (SC ETV), Dean Byrd (SCETV), Mark Jahnke (SCETV), Valarie Byrd (SDE), Charlie Zeberlein (DTO), Martin Crabtree (DIS), Denise Lyons (SCSL), Beth Shull (AT&T), Lynn Fralick (Spirit), Tommy Crutchfield (Immedion)

AGENDA ITEMS

Agenda Item 1	Approval of Minutes	Presenter:	Keith Osman

1. Keith asked for a motion to approve the K-12 minutes from the May meeting. Minutes were approved without corrections or changes.

Agenda Item 2	E-Rate Status/K-12 Network Status	Presenter:	Andrew Epting

FCC/USAC News

1. Proposed Eligible Services list has been issued.
2. USAC issued commitment adjustments to applicants pertaining to 15-20 year old applications.
    a. USAC reported they froze COMADs in response to roll out of EPC.
    b. No Statute of limitations.
    c. Dorchester 4 is the only known applicant in SC affected.

SC E-Rate Consortia Update

1. 2016-17 Past: E-Rate Funding Year (07/01/2016 – 06/30/2017)
    a. School and Special School Internet Application funded but in USAC appeal.
    b. Escalating BEARs older than 60 days to USAC management.
    c. No SC applicants were funded in Waves 48-55.
        • Denials for Berkeley SD and Chabad Academy.
2. 2017-18 Current: E-Rate Funding Year (07/01/2017 – 06/30/2018)
    a. Network Services Agreements have been issued.
    b. Waves 1-8 have been released and total $1,413,657.50 for 84 South Carolina applicants.
        • SC FCDLs are 6% slower than last year.
        • Nationwide FCDLs are 80% faster than last year.
3. 2018-19 Upcoming: E-Rate Funding Year (07/01/2018 – 06/30/2019)
    a. USAC-led applicant training scheduled for late October.
4. Internet Migration
    a. 88% complete with remaining sites being delayed by longstanding permitting issues.
5. State Master Contracts
    a. Long Distance awarded June 05, 2017.
    b. Hewlett Packard awarded June 15, 2017.
    c. Palo Alto awarded June 20, 2017.

Agenda Item 3	EOC – General Updates	Presenter:	Melanie Barton

1. K-12 Technology Survey caused concern as to how districts were spending their portion of the $29 million "Haley" money. This self-reported data revealed that many districts were spending the money on non-allowable items. These districts did not request waivers. It is felt that a large portion of this money should have been used on infrastructure updates.

Agenda Item 4	K-12 DNS Security Proposal	Presenter:	Martin Crabtree

1. Martin Crabtree with The Division of Information Security was on hand to talk about K-12 Technology Initiative Committee Security. He introduced a new option for security: Monitoring vs. Active Defense with Cisco Umbrella (formally Open D NS).
2. The monitoring system we currently have in place is reactive instead of proactive and is not very effective. System administration, operation and field service across the state is being conducted by 1temp FTE and 1 Full time security contractor and cannot effectively handle all K-12 entities. As of July 2017:
   a. The K-12 SIEM is at end of life and must be replaced.
   b. Key support infrastructure servers need replacement and upgrades.
   c. Two thirds of installed sensors are older than their life expectancy.
3. When problems are detected tickets are sent to site for only the highest level security sensor alerts. Site responses to security tickets vary widely by site – this is believed to be due to staff capability and workload. The result is less than 20% of tickets sent to K-12 sites being closed out with the SOC.
4. K-12 provided DDoS protection in 2015. This service is now included in the broadband rate under the new contract.
5. Understanding of Current K-12 Goals:
   a. Bandwidth utilization analysis and management – Provides ability to determine what is being consumed on Internet connections and by what applications or systems.
   b. Comprehensive Security and Privacy Program – Enables sites to protect their information and technology assets with a continuous risk based approach.
   c. Current resource investment is not sufficient to meet either objective.
6. K-12 Security Options:
   a. Bandwidth utilization analysis and management is not a core competency or function of DIS.
   b. There are many tools and methods to accomplish this goal that are typically provided by a network operations team.
   c. Must have comprehensive business and network situational awareness to effectively deploy tools and appropriately act on data.
   d. Estimated Cost: Unknown; DIS recommends the K-12 Committee request cost estimates for this service from our Internet Service Providers.
7. One such solution is Cisco Umbrella (OpenDNS) the cost comparable to what we are currently paying for monitoring. This solution would:
   a. Provide proven malware, phishing and command control prevention or disruption capabilities (currently in us by the State).
   b. Requires no hardware or software installation to provide standard protections (cloud-based service).
   c. Empowers schools to filter content, based on their own particular requirements.
   d. Once configured, requires relatively low manpower to maintain.
   e. Provides same level of service regardless of future bandwidth increases, unlike on premise hardware (e.g., intrusion detection sensors, firewalls, etc.).
   f. Requires relatively basic IT knowledge to implement, which most sites likely already have access to.
   g. Likely achievable with existing budget (K-12 Committee approval of shift in strategy).
   h. Compliments existing security technologies; adds a layer of infrastructure-based defense.
8. The committee would like to know if any agency is currently using this system and if so how is the system working for them.
9. Martin Crabtree, Charlie Zeberlein and Andrew Epting have been tasked with further research as to implementation and cost so that this option may be presented to the K-12 Principals.

Agenda Item 4	Committee Open Discussion	Presenter:	Keith Osman

1. Karen Rumfelt reported that James Gordon, who assisted with the K-12 budget, has retired and she will currently be handling the budget until a replacement is found.
2. Karen will be updating the current year's funds. We have currently received request from SC State Library and SC ETV. The Department of Education does not intend to request funding at this time.

Next Meeting	August 24, 2017
Location	Division of Technology, 4430 Broad River Road, Columbia, SC 29210