# K-12 TECHNOLOGY INITIATIVE COMMITTEE
# MEETING MINUTES

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| Meeting Date | December 15, 2014 |
| Meeting Location | DSIT – 4430 Broad River Road, Columbia, SC 29210 |
| Facilitator | Kyle Herron |
| Note Taker | Gay Hoyer |
| Attendees | Nola Armstrong (SC Tele. Assoc.), John Bane (DTO), Melanie Barton (EOC),Valarie Byrd (DTO), Bill Croteau (SCSL), Teena Frazer (Spirit), James Gordon (DTO),  Bobbi Kennedy (ETV), Sharron Myers (DTO), Beth Shull (AT&T),  Rick Makla (DIS),  Kristen Setzler (Calhoun Co. Library), Leesa Benggio (SCSL) |

## AGENDA ITEMS

| Agenda Item 1 | Approval of October Minutes | Presenter: | Kyle Herron |
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1. Kyle asked for a motion to approve the K-12 minutes from the October meeting.  Minutes were approved without corrections or changes.

| Agenda Item 2 | Palmetto Scene Charleston School Video | Presenter: | Valarie Byrd |
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1. One of the South Carolina K-12 School Technology Initiative's greatest challenges is closing the technology digital divide that exist in the states few remaining rural "undeserved bandwidth" schools where high-speed fiber isn't available. The bandwidth baseline "minimum bandwidth" speed provided for state network participants is 100 Mbps. This summer the committee achieved its goal of ensuring the last six underserved bandwidth public schools located in Charleston County School District have high-speed fiber connectivity starting academic year 2014-15. These schools reside on the barrier islands of Charleston, South Carolina where fiber accessibility did not exist or was very limited. In order to meet the needs of these schools a major project was deployed with the combined commitment of the school district, the Initiative and public provider third-party collaborations. This year long project was worth the wait and is one of the initiatives greatest accomplishments. Today each of these schools has the bandwidth coverage they need in order to accommodate immediate and future technology needs. A video presented by Palmetto Scene based on one of six formally underserved bandwidth Charleston County School District schools-Baptist Hill High School, Hollywood, South Carolina can be found on our website. https://sck12techinit.sc.gov

| Agenda Item 3 | Presentation by Charleston County School District | Presenter: | Thomas Nawrocki |
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1. Thomas Nawrocki, Network Operations Director, with Charleston County Schools was on hand to share with the committee a security issue that he encountered.
2. In late September, he began receiving numerous calls from various school district employees who were encountering problems with connecting to the district network resources.  It was discovered that the district network was under a DDOS (Distributed Denial of Service) attack.  Such attacks usually lead to a server overload. In general terms, DDOS attacks are implemented by either forcing the targeted computer(s) to reset, or consuming its resources so that it can no longer provide its intended service or obstructing the communication media between the intended users and the victim so that they can no longer communicate adequately.
3. When encountering this attack, millions of small packets, 4-6 million per second were hitting their network. These packets were small fragments of unknown programs that the network did not know how to handle.  The district was so busy trying to stop the attack that they were unable to determine what the hackers was actually trying to target.
4. The Network was eventually totally shut down leaving over 40,000 student as well as personnel at all levels without network access.
5. Thomas called in AT&T, who sent in a team of experts to mitigate the problem.  This cost the district $30,000 which was obtained via an emergency DDOS service procurement.
6. The District now pays AT&T for a monthly protection service, which is inexpensive, but necessary since the district is still receiving attacks.
7. Mr. Nawrocki wanted to bring this problem to the attention of the K-12 Committee and find out if they can be of any assistance to the SC Schools.

| Agenda Item 4 | E-Rate Status/K-12 Network Status | Presenter: | Valarie Byrd |
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## E-Rate News

1. December 11, 2014: FCC continues E-Rate Reboot to Meet the Needs of 21st Century Digital Learning. Public Notice: http://www.fcc.gov/document/fcc-continues-e-rate-reboot-meet-nations-digital-learing-needs

### Effective Funding Year 2015
- The Urban Cluster definition reconsideration: populations under 25,000 "Rural", 25,000+ "Urban".
- Library funding for Category Two budget support increased from $2.30 to $5.00/ per square foot for urbanized libraries.
- E-Rate funding cap increased by $1.5 billion, new cap $3.9 billion plus inflation adjustment.

### Effective Funding Year 2016
- Extension of the Category Two budget funding originally set for FY 2015 & 2016: FY 2017 – 2019
- Additional flexibility for schools and libraries seeking to purchase new broadband connections that require large upfront installation charges. Applicants will be able to pay for this non-recurring construction cost (non-discounted) over multiple years.
- E-Rate support for "self-constructed" fiber systems when cost effective vs. leased fiber service.
- Additional E-Rate support for installation charges up to 10% to match state funding for self-construction charges for mile facilities.
- Requirement placed on carrier receiving High-Cost Connected America Funds in rural areas to provide reasonable broadband prices comparable to urban areas.
- USAC directed to establish a Performance Management System to assess the effectiveness of the program's administration.

### Dismissed Petitions of Reconsideration:
- 10-year document retention rule
- The immediate phase-down support of voice telephone services and the elimination of specific components

## State E-Rate Program Status

2013-14 (Old) 07/01/2013 – 06/30/2014 Application
1. Funding Year officially closed.

2014-15 (Current) 07/01/2014 – 06/30/2015 Application
1. Over 300 vendor orders remaining. The majority of these orders are due to AT&T ASE projects.
2. E-Rate group worked with State Department of Education staff to assist in the developing a detailed technology survey. Input collected from some intern DTO core areas and publications.
3. Completed the FCC Fiber Map and ConnectSC data refresh submission

2015-16 (Upcoming) 07/01/2015 – 06/30/2016 Application
1. A total of ten E-Rate informational sessions (Trainings) were completed over the past two months.
2. Site validation documents were collected from all but one state network member.
3. **State E-Rate Data File (Free & Reduced Lunch Data) Formatting:** Continued to work with various State Department of Education staff to generate the initial draft 45th day of school data file to release to schools/districts for review. Awaiting the "Urban/Rural" designation file form USAC-SL. This file is pending the FCC registry posting of the E-Rate 2.1 Order.

## K-12 Network Status (External Broadband Availability Improvements)
1. Conversion for under-served/expensive bandwidth updates for Wireless and MPLS locations is as follows:
   **Districts: Solutions Update**
   - Hampton SD 1 – (All wireless connectivity) potential fiber solution confirmed. School District notification and project planning next phase 4-5 month long project. Anticipate completion early summer 2015.

   **Library Systems Solutions Update**:
   - Metro Ethernet solutions identified for the following Libraries:
     - (4) ABBE Library System **ALL**: Fiber confirmed – Vendor orders in progress
     - (4) AHJ Library System **ALL:** Orders will be placed after equipment confirmation
     - (2) McClellanville, Edisto, St. Paul Branch **#1 left** (Charleston Library System) **ALL**: Orders in progress
     - (2) Ridgeway (Fairfield Library System) **ALL:** Orders in progress
     - (2) Edisto Beach (Colleton Library System) **ALL:** Awaiting signed MOU before order processing

- o (2) *Darlington (Lamar Branch): **No fiber**, Muti-T1 solution –awaiting Router
- o (3) Spartanburg Library System <u>**ALL**</u>: Fiber confirmed – awaiting pricing
- o (4) *Orangeburg Library System: **No Fiber**, Will remain via Multi-TI

**\*York evaluating various layout options for cost effectiveness**

### <u>Bandwidth Allocation Deployment Phase IV-Fiber Placement Opportunities</u>
1. The following districts have completed projects: **Fairfield School District**
2. The following districts have completed evaluations. No Opportunity: **None**
3. The following districts have active projects:
   - **Berkeley Phase IIIb (ETA October)**
   - **Dillon 4 Phase II (Awaiting Building Construction)**
4. The following districts are being evaluated: **None**

| Agenda Item 5 | Network Changes | Presenter: | Kyle Herron |
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1. The VoIP solicitation has been reviewed and released.

| Agenda Item 6 | K-12 Security Project | Presenter: | Rick Makla |
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1. The security group should have the event processors in and deployed within the next thirty days.
2. Continue to order and install new sensors in schools and libraries as well as upgrade sensors that are no longer working or are unable to handle current capacity.

| Agenda Item 7 | EOC – General Updates | Presenter: | Melanie Barton |
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1. EOC has received results from the Technology Survey and a large number of districts/schools have indicated that they wish to have the Division of Technology assist them in how to spend their monies efficiently and effectively on technology.
2. EOC will be compiling the results into a document that they hope to have completed in January.
3. Because of the huge response, Division of Technology does not currently have sufficient manpower to fulfill all requests and will be using the Tapfin Contract, which is a staff augmentation contract to staff the project. A position description based on the needs of the requests is currently being written.

| Agenda Item 9 | Open Discussion | Presenter: | Kyle Herron |
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1. NA

| Next Meeting | January 22, 2015 |
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| Location | Division of State IT, 4430 Broad River Road, Columbia, SC 29210 |