

QUARTERLY PERFORMANCE PROGRESS REPORT FOR BROADBAND INFRASTRUCTURE PROJECTS

General Information

1. Federal Agency and Organizational Element to Which Report is Submitted Department of Commerce, National Telecommunications and Information Administration	2. Award Identification Number NT10BIX5570026	3. DUNS Number 831415570
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4. Recipient Organization

Keystone Initiative For Network Based Education and Research 777 W. Harrisburg Pike, Middletown, PA 17057-4846

5. Current Reporting Period End Date (MM/DD/YYYY) 06-30-2012	6. Is this the last Report of the Award Period? <input type="radio"/> Yes <input checked="" type="radio"/> No
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7. Certification: I certify to the best of my knowledge and belief that this report is correct and complete for performance of activities for the purposes set forth in the award documents.

7a. Typed or Printed Name and Title of Certifying Official Patricia Campbell Compliance Officer	7c. Telephone (area code, number and extension) 5704227954
	7d. Email Address pcampbell@kinber.org

7b. Signature of Certifying Official Submitted Electronically	7e. Date Report Submitted (MM/DD/YYYY): 08-09-2012
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Project Indicators (This Quarter)

1. Please describe significant project accomplishments completed during this quarter (600 words or less).

At the end of Q2, 2012 KINBER reports 1,001 miles of fiber completed and thirty-nine (39) community anchor institutions (CAIS) connected to the network. Building entrance construction and cabinet delivery at CAIs is complete at 59 sites (95%).

- KINBER has completed the network equipment installations at fourteen (14) of the twenty-three (23) planned locations to house equipment.
- KINBER has completed the installation of commodity Internet connectivity at one of our two major routing nodes and obtained Internet Protocol (IP) and Autonomous System Numbers (ASN) to allow us to exchange BGP information with upstream providers.
- KINBER has also completed the installation of Research & Education (R&E) connectivity for exchange of Internet2 routes.
- KINBER continues to build out the Multiprotocol Label Switching (MPLS) based Virtual Private Networks (VPN) services to use of out-of-band management and connectivity for remote management.
- KINBER has completed the turn-up of its management database and related systems for monitoring and management of the PennREN network. Segment B nodes are integrated into the systems with alerts, alarms, and SNMP management operating as expected.
- The integration of network performance management tools and servers into the Service nodes on Segment B have been completed. Performance information is being generated and pulled into the various reporting platforms.
- KINBER demonstrated Virtual Private Lan Service (VPLS)-based services and connectivity in support of the KINBER member meeting in April. This was PennREN's first "client" connecting Lehigh University to Montgomery County Community College for demonstration purposes
- Segment B has been lit and tested and will shortly go into a Day 1 production status.
- KINBER continues to work with last mile providers to establish a last mile services strategy that includes the implementation of Network to Network Interfaces (NNI) as a way to connect off-net customers to PennREN.
- KINBER has developed the technology solutions for providing last mile services to PennREN ON-NET customers who wish to be early adopters and get connected as soon as possible.
- KINBER continues to use a milestone based work-breakdown structure to manage field and engineering activities. KINBER's partners are working together collaboratively with online tools and services to manage the work efforts.
- KINBER continues to manage risk by use of disciplined project management, effective communication among team members and other best practices. Site readiness is being managed directly by KINBER Operations team members. No significant personnel or partner turnover has occurred in the last quarter.
- KINBER and its partners continue to manage risk with equipment failures and engineering mistakes by paying close attention to detailed configuration checklists, design documents, and architectural documents. KINBER has included specific unit testing, system testing in its segment turnover activities milestones. Hardware failures have been minimal and well within expected norms.
- No significant problems with fiber construction, splicing, or other outside plant work have occurred to affect the schedule.
- KINBER has developed its service catalog, product data sheets and other materials to use in working with members on the use of PennREN.
- KINBER has added a network engineer to its staff.

2. Please provide the percent complete for the following key milestones in your project. Write "0" in the Percent Complete column and "N/A" in the Narrative column if your project does not include this activity. If you provided additional milestones in your baseline plan, please insert them at the bottom of the table. Unless otherwise indicated in the instructions, figures should be reported cumulatively from award inception to the end of the most recent reporting quarter. Please provide a narrative description if the percent complete is different from the target provided in your baseline plan (300 words or less).

	Milestone	Percent Complete	Narrative (describe reasons for any variance from baseline plan or subsequent written updates provided to your program officer)
2a.	Overall Project	72	Project is slightly behind due to make-ready approvals and related work. Also the fixed price contract only allows KINBER to pay its construction vendor for completed milestones; not proportionally to the work completed. This results in an artificially low completion percentage.
2b.	Environmental Assessment	100	Milestone is complete.
2c.	Network Design	100	Milestone is complete.
2d.	Rights of Way	99	Project is slightly behind due to length of time it takes to get approvals.
2e.	Construction Permits and Other Approvals	97	Project is slightly behind due to length of time it takes to get approvals.
2f.	Site Preparation	95	59 of 62 sites are completed
2g.	Equipment Procurement	100	All network equipment has been procured.
2h.	Network Build (all components - owned, leased, IRU, etc)	75	Project is on schedule.

	Milestone	Percent Complete	Narrative (describe reasons for any variance from baseline plan or subsequent written updates provided to your program officer)
2i.	Equipment Deployment	61	Equipment has been deployed at 14 of 23 sites
2j.	Network Testing	6	Although fiber and equipment have been deployed in many sites on the network, connectivity has not been established and the network does not yet have a lit segment to test the network. The project schedule has been slowed by small portions of fiber in early segments that can not be connected to light the entire segment. KINBER is addressing this milestone by delivering and configuring equipment to sites prior to the fiber being complete and tested. We will deploy more crews, as necessary to catch up on progress on this milestone once the fiber segments are complete.
2k.	Other (please specify): Fiber Procurement	100	KINBER has received all of the fiber necessary to build the network.

3. To the extent not covered above, please describe any challenges or issues faced during this past quarter in achieving planned progress against the project milestones listed above. In particular, please identify any areas or issues where technical assistance from the BTOP program may be useful (600 words or less).

Waiting for rights of way, construction permits and other approvals has slowed the construction progress of the project and impacted the payment and use of federal funds. There are a number of segments on the network that are mostly complete but waiting on a small section (such as a train or bridge crossing) approval to actually complete and fully test the fiber and equipment for that segment.

4. Please report the following information regarding network build progress. Write "0" in the Total column and "N/A" in the Narrative column if your project does not include this activity. Unless otherwise indicated in the instructions, figures should be reported cumulatively from award inception to the end of the most recent reporting quarter. Please provide a narrative description if the total is different from the target provided in your baseline plan (600 words or less).

Indicator	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
New network miles deployed	1,001	This exceeds the baseline estimate of 813 miles.
New network miles leased	0	n/a for this project
Existing network miles upgraded	0	n/a for this project
Existing network miles leased	0	n/a for this project
Number of miles of new fiber (aerial or underground)	1,001	This exceeds the baseline estimate of 813 miles.
Number of new wireless links	0	n/a for this project
Number of new towers	0	n/a for this project
Number of new and/or upgraded interconnection points	0	None at this time

For questions 5 and 6 please include information relating to agreements that you are negotiating or have entered into, or that your sub recipient, contractor or subcontractor is negotiating or entered into.

5a. If applicable, please provide the following information with regard to agreements with broadband wholesalers and/or last mile providers as a result of your project.

Indicators	
Number of signed agreements with broadband wholesalers or last mile providers	0
Number of agreements currently being negotiated with broadband wholesalers or last mile providers	3
Average term of signed agreements (in quarters)	0

5b. Please list the names of the wholesale and last mile providers with whom you have signed agreements (100 words or less). Providers:
None at this time.

5c. What wholesale services are being provided by this project? Please describe below. As an attachment to this report, please provide pricing plans (in \$ per month) associated with each wholesale service provided by your product (100 words or less). Wholesale services description:

PennREN Proposed On-net Network Service Prices for KINBER members, FY2013.

- Dark Fiber — \$700 per strand mile per year
- 1G Ethernet Port Connection — \$1,650
- 10G Ethernet Port Connection — \$5,000
- 100M Ethernet Point-to-Point — \$2,000
- 1G Ethernet Point-to-Point — \$5,000
- 10G Ethernet Point-to-Point — \$15,000
- 10G Lambda Point-to-Point — \$15,000
- Commodity Internet - \$5 per Mbps

5d. If you have designated a third party to operate all or a portion of your network, please provide the name and contact information for this third party, indicate if this entity is a sub recipient, contractor, and/or subcontractor, and describe with specificity the portion of your network this this third party operates (600 words or less).

n/a

6. Please provide the data according to the type of subscriber. Write "0" in the Total column and "N/A" in the Narrative column if your project does not pass or serve a particular subscriber type. Unless otherwise indicated in the instructions, figures should be reported cumulatively from award inception to the end of the most recent reporting quarter. Please provide a narrative description if the total is different from the target provided in your baseline plan (300 words or less).

Subscriber Type	Access Type	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
Broadband Wholesalers or Last Mile Providers	Providers with signed agreements receiving new access	0	Network services are not yet being offered.
	Providers with signed agreements receiving improved access	0	Network services are not yet being offered.
	Providers with signed agreements receiving access to dark fiber	0	Network services are not yet being offered.
Community Anchor Institutions (including Government institutions)	Please identify the speed tiers that are available and the number of subscribers for each	0	100 M to 10 G
	Total subscribers served	39	Although 39 CAIs have been connected to the network, no services are currently being offered.
	Subscribers receiving new access	3	Although 39 CAIs have been connected to the network, no services are currently being offered.
	Subscribers receiving improved access	36	Although 39 CAIs have been connected to the network, no services are currently being offered.
Residential / Households	Please identify the speed tiers that are available and the number or subscribers for each	0	No service is currently being offered.
	Entities passed	0	n/a. KINBER will not be offering last mile or residential services.
	Total subscribers served	0	n/a. KINBER will not be offering last mile or residential services.
	Subscribers receiving new access	0	n/a. KINBER will not be offering last mile or residential services.
	Subscribers receiving improved access	0	n/a. KINBER will not be offering last mile or residential services.

Subscriber Type	Access Type	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
Businesses	Entities passed	0	n/a. KINBER will not be offering last mile or service to businesses.
	Total subscribers served	0	n/a. KINBER will not be offering last mile or service to businesses.
	Subscribers receiving new access	0	n/a. KINBER will not be offering last mile or service to businesses.
	Subscribers receiving improved access	0	n/a. KINBER will not be offering last mile or service to businesses.
	Please identify the speed tiers that are available and the number of subscribers for each	0	n/a. KINBER will not be offering last mile or service to businesses.

7. Please describe any special offerings you may provide (600 words or less).
None at this time.

8a. Have your network management practices changed over the last quarter? Yes No

8b. If so, please describe the changes (300 words or less).
N/a. There have been no changes.

9. Community Anchor Institutions:

Using the table below, please provide a list by service area of the community anchor institutions (including Government institutions) connected to your network as a result of BTOP funds. Figures should be reported for the most recent reporting quarter only (NOT cumulatively). Also indicate whether your organization is currently providing broadband service to the anchor institution. Finally, provide a short narrative description with examples of how institutions are using BTOP-funded infrastructure (300 words or less).

Institution Name	Service Area (town or county)	Type of Anchor Institution (as defined in your baseline)	Are you also the broadband service provider for this institution? (Yes / No)	Narrative description of how anchor institutions are using BTOP-funded infrastructure
n/a	n/a	n/a	n/a	no new CAIS have been added in this Quarter

Project Indicators (Next Quarter)

1. Please describe significant project accomplishments planned for completion during the next quarter (600 words or less).

- KINBER plans to have 1350 fiber miles complete and 57 CAIs connected to the network. KINBER will complete the installation of equipment in all twenty-three (23) nodes by the end of September 2012. Slips to this schedule will not significantly affect the project.
 - KINBER plans to complete testing and turn-up of four segments in Q3. Once equipment installations and outside plant construction is completed, resources will be focused on accelerating the turn up of segments into Day 1 production status.
 - KINBER expects to complete additional commodity Internet and R&E services out of its second major routing node in during this quarter.
 - KINBER expects to complete its forms for network services agreements that include terms, conditions, and other information about services in this quarter.
- KINBER will begin its annual audit process and also hire additional staff.

2. Please provide the percent complete for the following key milestones in your project. Write "0" in the Planned Percent Complete column and "N/A" in the Narrative column if your project does not include this activity. If you provided additional milestones in your baseline plan, please insert them at the bottom of the table. Unless otherwise indicated in the instructions, figures should be reported cumulatively from award inception to the end of the next reporting quarter. Please provide a narrative description if the percent complete is different from the target provided in your baseline plan (300 words or less).

	Milestone	Planned Percent Complete	Narrative (describe reasons for any variance from baseline plan or any other relevant information)
2a.	Overall Project	85	This projection is slightly below the targeted baseline of 89% mostly due to anticipated delays in make ready work and the fixed price contract payment schedule.

	Milestone	Planned Percent Complete	Narrative (describe reasons for any variance from baseline plan or any other relevant information)
2b.	Environmental Assessment	100	Milestone complete.
2c.	Network Design	100	Milestone complete.
2d.	Rights of Way	100	Milestone complete.
2e.	Construction Permits and Other Approvals	100	Milestone complete.
2f.	Site Preparation	100	Milestone complete.
2g.	Equipment Procurement	100	Milestone complete.
2h.	Network Build (all components - owned, leased, IRU, etc.)	90	Milestone is on schedule.
2i.	Equipment Deployment	90	Milestone is on schedule.
2j.	Network Testing	25	This milestone is behind schedule due to completion of small portions of fiber segments. Additional crews will be deployed when necessary to ensure the network is complete and tested by the end of the project.
2k.	Other (please specify): Fiber Procurement	100	KINBER has received all fiber necessary to build the network.

3. Please describe any challenges or issues anticipated during the next quarter that may impact planned progress against the project milestones listed above. In particular, please identify any areas or issues where technical assistance from the BTOP program may be useful (600 words or less).

We continue to work with local utility companies to get approvals and make ready work completed although this has slowed some segments of the project down. We are working diligently to correct any delays this might have on the project completion timeline.

Infrastructure Budget Execution Details

Activity Based Expenditures (Infrastructure)

1. Please provide details below on your total budget, cumulative actual expenditures (for the period ending the current quarter), and cumulative anticipated expenditures (for the period ending next quarter) for each line item, including detailed disbursements of both matching funds and federal funds from project inception through end of this quarter (actual) or next quarter (anticipated). Actual and anticipated figures should be reported cumulatively from award inception to the end of the applicable reporting quarter.

Budget for Entire Project				Actuals from Project Inception through End of Current Reporting Period			Anticipated Actuals from Project Inception through End of Next Reporting Period		
Cost Classification	Total Cost (plan)	Matching Funds (plan)	Federal Funds (plan)	Total Cost	Matching Funds	Federal Funds	Total Costs	Matching Funds	Federal Funds
a. Administrative and legal expenses	\$3,513,083	\$3,513,083	\$0	\$3,122,670	\$3,122,670	\$0	\$3,250,000	\$3,250,000	\$0
b. Land, structures, right-of-ways, appraisals, etc.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
c. Relocation expenses and payments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
d. Architectural and engineering fees	\$512,500	\$292,500	\$220,000	\$512,500	\$292,500	\$220,000	\$512,500	\$292,500	\$220,000
e. Other architectural and engineering fees	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
f. Project inspection fees	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
g. Site work	\$190,000	\$190,000	\$0	\$190,000	\$190,000	\$0	\$190,000	\$190,000	\$0
h. Demolition and removal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
i. Construction	\$118,892,448	\$23,691,770	\$95,200,678	\$84,149,308	\$16,782,313	\$67,366,995	\$99,500,000	\$19,500,000	\$80,000,000
j. Equipment	\$5,850,000	\$1,610,000	\$4,240,000	\$5,460,837	\$1,610,000	\$3,850,837	\$5,610,000	\$1,610,000	\$4,000,000
k. Miscellaneous	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
l. SUBTOTAL (add a through k)	\$128,958,031	\$29,297,353	\$99,660,678	\$93,435,315	\$21,997,483	\$71,437,832	\$109,062,500	\$24,842,500	\$84,220,000
m. Contingencies									
n. TOTALS (sum of l and m)	\$128,958,031	\$29,297,353	\$99,660,678	\$93,435,315	\$21,997,483	\$71,437,832	\$109,062,500	\$24,842,500	\$84,220,000

2. Program Income: Please provide the program income you listed in your application budget and actuals to date through the end of the reporting period.

a. Application Budget Program Income: \$0	b. Program Income to Date: \$0
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