

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 341 N. Science Park Road
 Suite 209, State College, PA 16803-2291

5. Current Reporting Period End Date (MM/DD/YYYY) 12-31-2012	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) 6104289180
	7d. Email Address pcampbell@kinber.org

7b. Signature of Certifying Official Submitted Electronically	7e. Date Report Submitted (MM/DD/YYYY): 02-11-2013
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Project Indicators (This Quarter)

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

As of the end of Q4 2012, KINBER reports 1,437 miles of fiber complete and 62 CAIs connected to the network. Additionally,

- KINBER has completed the network equipment installations at all twenty-three (23) of the twenty-three (23) planned locations to house equipment.
- KINBER has promoted ten (10) of the fifteen (15) network segments into production status (Day 1). Segments A, I, J, K, O are currently being worked on by fiber construction teams with various spans and locations on these segments in Day 0 (testing activities) underway.
- KINBER has completed the designs and implementation of the final management network architecture for out-of-band management of all node locations.
- KINBER and its Network Operations Center continues to develop and customize the various reporting and management tools for operations of PennREN. These include a portal pages from which members can access various information tools such as online calendars, service request and trouble ticketing, performance reports, and real-time performance management tools.
- KINBER continues to develop and use the Footprints trouble-ticketing system for all problems, change management, and customer provisioning activities. KINBER has developed and integrated business processes including fiber maintenance, fiber IRU requests, and incident management procedures for interfacing with the field maintenance teams.
- The Network Operation Center has completed the integration of network performance management tools and servers into the Service nodes on all segments in production status. Performance information is being generated and pulled into various reporting platforms.
- KINBER has delivered new service to four customers utilizing the PennREN network.
- 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 and ensure the project is completed in a timely manner.
- 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.
- KINBER and its partners continue to manage risk with equipment failures and engineering issues.
- KINBER has included specific unit testing, system testing in its segment turnover activities milestones. Hardware failures have been minimal and well within expected norms.
- KINBER continues to develop its service catalog, product data sheets and other materials to use in working with members on the use of PennREN.

KINBER continues to interact with the community and political leadership across the commonwealth to get the message out about the impact KINBER and PennREN will have.

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	92	Project is slightly behind due to extreme weather in October 2012 (superstorm Sandy) and the deployment of make-ready crews to deal with emergency repairs in other states.
2b.	Environmental Assessment	100	Milestone is complete.
2c.	Network Design	100	Milestone is complete.
2d.	Rights of Way	100	Milestone is complete.
2e.	Construction Permits and Other Approvals	99	We are awaiting one final approval for a bridge crossing over a railroad.
2f.	Site Preparation	100	Milestone is complete.
2g.	Equipment Procurement	100	Milestone is complete.
2h.	Network Build (all components - owned, leased, IRU, etc)	95	Project is slightly behind due to weather related construction delays.

	Milestone	Percent Complete	Narrative (describe reasons for any variance from baseline plan or subsequent written updates provided to your program officer)
2i.	Equipment Deployment	100	Milestone is complete.
2j.	Network Testing	67	10 of the 15 segments have been lit are in various stages of testing. This milestone has been delayed due to a 60-day construction schedule impact to the project caused by Superstorm Sandy.
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).

KINBER was heavily impacted by Superstorm Sandy in October and November 2012. Not only was part of the network damaged by the storm, but make-ready and splicing crews that were out in the field were re-deployed to other states to assist in the emergency repairs of poles, wires,and fiber due to the storm's impact. KINBER received an official Notice of Schedule Impact of 60 days from its construction vendor but hopes to be able to get all fiber strung on the coming months.

There is also one bridge crossing (Segment A to the North of Bethlehem) that has been problematic in getting ROW permitting because it crosses over a railyard.

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	1,437	Approximately 89% of the fiber was completed by the end of Q4 2012. Project is slightly behind due to weather related delays but all fiber should be completed in Q1 2013.
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)	1,437	Approximately 89% of the fiber was completed by the end of Q4 2012. Project is slightly behind due to weather related delays but all fiber should be completed in Q1 2013.
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	62	Project is on schedule.

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	3
Number of agreements currently being negotiated with broadband wholesalers or last mile providers	2
Average term of signed agreements (in quarters)	44

5b. Please list the names of the wholesale and last mile providers with whom you have signed agreements (100 words or less). Providers: Sunesys, LLC, One Source Networks and Windstream

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:

The three signed agreements are in place to provide last mile solutions and access to offnet members. These services will be coordinated with KINBER staff and customized to the individual institution's needs.

Proposed FY2013 prices for on-net services to members :

- Dark Fiber \$700 per strand mile
- 1G Ethernet Port \$1650
- 10G Ethernet Port \$5,000
- 100M Ethernet Port \$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 \$3 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
KINBER is operating the network.

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	2	Three last mile providers have entered into contracts with KINBER.
	Providers with signed agreements receiving improved access	0	We are unaware if the providers' service was improved.
	Providers with signed agreements receiving access to dark fiber	1	One last mile provider has entered into an IRU with KINBER for dark fiber.
	Please identify the speed tiers that are available and the number of subscribers for each	0	100M to 10G
Community Anchor Institutions (including Government institutions)	Total subscribers served	62	62 CAIs are connected to the network.
	Subscribers receiving new access	3	To date, three locations have received new access through the PennREN network.
	Subscribers receiving improved access	59	There are 59 CAIs connected to the network who will receive improved access.
	Please identify the speed tiers that are available and the number or subscribers for each	0	100M to 10G
Residential / Households	Entities passed	0	n/a KINBER is not offering last mile or residential services.
	Total subscribers served	0	n/a KINBER is not offering last mile or residential services.
	Subscribers receiving new access	0	n/a KINBER is not offering last mile or residential services.
	Subscribers receiving improved access	0	n/a KINBER is not 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)
	Please identify the speed tiers that are available and the number of subscribers for each	0	n/a KINBER is not offering last mile or residential services.
Businesses	Entities passed	0	n/a KINBER is not offering last mile or services to businesses.
	Total subscribers served	0	n/a KINBER is not offering last mile or services to businesses.
	Subscribers receiving new access	0	n/a KINBER is not offering last mile or services to businesses.
	Subscribers receiving improved access	0	n/a KINBER is not offering last mile or services to businesses.
	Please identify the speed tiers that are available and the number of subscribers for each	0	n/a KINBER is not offering last mile or services 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

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
Edinboro University	Edinboro	Other Institution of Higher Education	No	Although this location is connected to the network, no services have been provided to date.
University of Pittsburgh - Titusville	Titusville	Other Institution of Higher Education	No	Although this location is connected to the network, no services have been provided to date.
Allegheny College	Meadville	Other Institution of Higher Education	No	Although this location is connected to the network, no services have been provided to date.

Project Indicators (Next Quarter)

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

Superstorm Sandy caused delays in the construction of the outside fiber plant have impacted our schedule and not allowed us to complete the segments as originally planned in Q4 2012. KINBER anticipates having all 1613 miles of fiber hung and all 62 CAls connected. KINBER expects to have 5 Last Mile provider agreements signed.

- A detailed installation plan has been created for promoting these segments into production status (Day 1) in Q1 2013.
- KINBER plans to complete the turn up and promotion to production status of the remaining segments (listed above) by the end of February 2013.
- KINBER will be completing its plans for quality of service features to utilize in the PennREN network.
- All fiber installation will be completed in Q1 2013 and network testing will continue.
- KINBER anticipates signing new customers throughout the quarter.

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	95	All fiber and electronics will be in place in Q1 2013. KINBER will use the additional time to complete splicing and network testing activities.
2b.	Environmental Assessment	100	Milestone is complete.
2c.	Network Design	100	Milestone is complete.
2d.	Rights of Way	100	Milestone is complete.
2e.	Construction Permits and Other Approvals	100	Milestone is complete.
2f.	Site Preparation	100	Milestone is complete.
2g.	Equipment Procurement	100	Milestone is complete.
2h.	Network Build (all components - owned, leased, IRU, etc.)	95	All fiber and electronics will be in place in Q1 2013.
2i.	Equipment Deployment	100	Milestone is complete.
2j.	Network Testing	80	All fiber and electronics will be in place in Q1 2013. K
2k.	Other (please specify): Fiber Procurement	100	KINBER has received all of the fiber optic cable necessary to complete the project.

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).

Weather related delays may be a factor in completing the fiber build in Q1 2013. No other challenges are anticipated.

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	\$3,513,083	\$3,513,083	\$0	\$3,513,083	\$3,513,083	\$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	\$108,971,911	\$21,833,553	\$87,138,358	\$113,000,000	\$23,000,000	\$90,000,000
j. Equipment	\$5,850,000	\$1,610,000	\$4,240,000	\$5,473,356	\$1,610,000	\$3,863,356	\$5,850,000	\$1,610,000	\$4,240,000
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	\$118,660,850	\$27,439,136	\$91,221,714	\$123,065,583	\$28,605,583	\$94,460,000
m. Contingencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
n. TOTALS (sum of l and m)	\$128,958,031	\$29,297,353	\$99,660,678	\$118,660,850	\$27,439,136	\$91,221,714	\$123,065,583	\$28,605,583	\$94,460,000

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: \$543,526
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