

**QUARTERLY PERFORMANCE PROGRESS REPORT FOR BROADBAND INFRASTRUCTURE PROJECTS**

General Information		
<b>1. Federal Agency and Organizational Element to Which Report is Submitted</b>  Department of Commerce, National Telecommunications and Information Administration	<b>2. Award Identification Number</b>  NT10BIX5570075	<b>3. DUNS Number</b>  969524214
<b>4. Recipient Organization</b>  University Corporation For Advanced Internet Development 1150 18th Street, NW, #1020, Washington, DC 20036-3825		
<b>5. Current Reporting Period End Date (MM/DD/YYYY)</b>  12-31-2010	<b>6. Is this the last Report of the Award Period?</b>  <input type="radio"/> Yes <input checked="" type="radio"/> No	
<b>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.</b>		
<b>7a. Typed or Printed Name and Title of Certifying Official</b>  Nili Tannenbaum	<b>7c. Telephone (area code, number and extension)</b>  X	
	<b>7d. Email Address</b>  ntannen@internet2.edu	
<b>7b. Signature of Certifying Official</b>  Submitted Electronically	<b>7e. Date Report Submitted (MM/DD/YYYY):</b>  02-24-2011	

**Project Indicators (This Quarter)**

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

During the third reporting quarter (from October 1st, 2010 through December 31st, 2010), Internet2 continued to make significant progress towards building a successful U.S. UCAN infrastructure.

Major accomplishments during this period include: 1) Completed evaluation of responses to optical network equipment request for pricing; 2) Selected vendors and equipment for optical network implementation 3) 95% completion of network optical and routing layer designs and implementation plan; 4) 75% completion of the design to integrate the peering service with U.S. UCAN; 5) Completed the process of articulating and posting network practices and policies (see "http://www.internet2.edu/network/network\_mgmt\_policy.html" http://www.internet2.edu/network/network\_mgmt\_policy.html); 6) Finalized contract terms for major supplier of optical fiber; 7) Purchased equipment to upgrade eight existing Juniper T640 routers to the state-of-the-art Juniper T1600 routers. These upgrades will be placed in service during Q1 2011.

**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	10	The project anticipated roughly \$1M in installation expenses that would have been the result of executing the IRU contract with Level 3. Since the contract signing was delayed until the next quarter, the project spending is roughly \$1M or 1% below projections.
2b.	Environmental Assessment	0	NA
2c.	Network Design	100	NA
2d.	Rights of Way	0	NA
2e.	Construction Permits and Other Approvals	0	NA
2f.	Site Preparation	0	NA
2g.	Equipment Procurement	10	Rather than purchasing new routers for the peering service portion of the network, existing router platforms within the core of the network are receiving an upgrade and the former core routers are being moved to the peering service. This resulted in a slight change in the timing of expenses for this quarter.
2h.	Network Build (all components - owned, leased, IRU, etc)	5	The original baseline estimate for network build anticipated the IRU contract being completed during this reported quarter. The IRU contract was completed in the quarter following the one for this report, and therefore we anticipate catching up significantly to this milestone.
2i.	Equipment Deployment	0	NA
2j.	Network Testing	0	NA
2k.	Other (please specify):	0	NA

**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).**

NA

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**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	0	NA
New network miles leased	0	NA
Existing network miles upgraded	0	NA
Existing network miles leased	0	NA
Number of miles of new fiber (aerial or underground)	0	NA
Number of new wireless links	0	NA
Number of new towers	0	NA
Number of new and/or upgraded interconnection points	0	NA

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	20
Number of agreements currently being negotiated with broadband wholesalers or last mile providers	0
Average term of signed agreements (in quarters)	4

**5b. Please list the names of the wholesale and last mile providers with whom you have signed agreements (100 words or less). Providers:**

These are the URLs of the last mile providers: [www.cenic.org](http://www.cenic.org), [www.3rox.net](http://www.3rox.net), [www.cic.uiuc.edu](http://www.cic.uiuc.edu), [www.sox.net](http://www.sox.net), [www.greatplains.net](http://www.greatplains.net), [indiana.gigapop.net](http://indiana.gigapop.net), [kyron.ky.gov](http://kyron.ky.gov), [www.tx-learn.org](http://www.tx-learn.org), [www.loni.org](http://www.loni.org), [www.magpi.net](http://www.magpi.net), [wiki.maxgigapop.net](http://wiki.maxgigapop.net), [www.mcmc.org](http://www.mcmc.org), [www.merit.edu](http://www.merit.edu), [www.mren.org](http://www.mren.org), [www.nox.org](http://www.nox.org), [www.nysernet.org](http://www.nysernet.org), [www.uoregon.edu](http://www.uoregon.edu), [www.pnw-gigapop.net](http://www.pnw-gigapop.net), [www.memphis.edu](http://www.memphis.edu), [www.uen.org](http://www.uen.org)

**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:**

Two 5 gigabit network connections \$32,500/mo  
 One 10 gigabit network connection \$41,600/mo  
 Two 10 gigabit network connections \$45,500/mo

**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).**

The Indiana University Global Research Network Operations Center, sub recipient of the project, operates the network on the behalf of Internet2. Their contact information follows:

Dave Jent  
 Associate Vice President for Networks  
 Global Research Network Operations Center  
 535 W. Michigan St  
 Indianapolis, IN 46202  
 USA  
 Phone: (317) 274-7788  
 Email: [globalnoc@iu.edu](mailto:globalnoc@iu.edu)

**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)
<b>Broadband Wholesalers or Last Mile Providers</b>	Providers with signed agreements receiving new access	0	NA
	Providers with signed agreements receiving improved access	20	The project had anticipated one of the providers splitting into two providers, resulting in an increase in the number. This did not occur.
	Providers with signed agreements receiving access to dark fiber	0	NA
	Please identify the speed tiers that are available and the number of subscribers for each	3	5 subscribers of two 5 gigabit network connections 6 subscribers of one 10 gigabit network connections 9 subscribers of two 10 gigabit network connections
<b>Community Anchor Institutions (including Government institutions)</b>	Total subscribers served	0	NA
	Subscribers receiving new access	0	NA
	Subscribers receiving improved access	0	NA
	Please identify the speed tiers that are available and the number or subscribers for each	0	NA
<b>Residential / Households</b>	Entities passed	0	NA
	Total subscribers served	0	NA
	Subscribers receiving new access	0	NA
	Subscribers receiving improved access	0	NA
	Please identify the speed tiers that are available and the number of subscribers for each	0	NA
<b>Businesses</b>	Entities passed	0	NA
	Total subscribers served	0	NA
	Subscribers receiving new access	0	NA
	Subscribers receiving improved access	0	NA
	Please identify the speed tiers that are available and the number of subscribers for each	0	NA

**7. Please describe any special offerings you may provide (600 words or less).**

The project offers native IPv6 and IP multicast access in addition to the normal IPv4 connectivity.

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

**8b. If so, please describe the changes (300 words or less).**

NA

**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)	Type of Anchor Institution (as)	Are you also the broadband	Narrative description of how anchor institutions are using BTOP-funded infrastructure

	or county)	defined in your baseline)	service provider for this institution? (Yes / No)	
NA	NA	NA	NA	NA

**Project Indicators (Next Quarter)**

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

- Completion of the IRU agreement with our major supplier Level 3.
- The upgrade of approximately four core routers and the placement of four former core routers into the peering service portion of the network
- Appointment of an interim Director of the US UCAN organization.
- Completion of the optical platform agreement.
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**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	34	NA
2b.	Environmental Assessment	0	NA
2c.	Network Design	100	NA
2d.	Rights of Way	0	NA
2e.	Construction Permits and Other Approvals	0	NA
2f.	Site Preparation	0	NA
2g.	Equipment Procurement	33	The timing of our optical equipment purchase has improved, thus the increase in this estimate over baseline.
2h.	Network Build (all components - owned, leased, IRU, etc.)	25	This is a bit low due to delay in signing IRU agreement
2i.	Equipment Deployment	10	The requirement to upgrade core routers so that the existing core routers can be deployed to the peering service has accelerated this activity over baseline.
2j.	Network Testing	0	NA
2k.	Other (please specify):	0	NA

**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 may need to seek advice on re-structuring what were anticipated to be sub-recipient agreements with the member of the Northern Tier Network Consortium. One or more Northern Tier Members may be unable to fully comply with the flow-down requirements. We may seek to retain ownership of the federally acquired assets and structure a more conventional agreement for them to reflect the value their contribution of fiber brings to the project.

### 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	\$1,024,497	\$1,024,497	\$0	\$699,428	\$699,428	\$0	\$699,428	\$699,428	\$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	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
e. Other architectural and engineering fees	\$9,113,965	\$5,170,096	\$3,943,869	\$432,566	\$448,031	\$0	\$3,215,000	\$800,000	\$2,415,000
f. Project inspection fees	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
g. Site work	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
h. Demolition and removal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
i. Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
j. Equipment	\$86,655,145	\$28,058,852	\$58,596,293	\$8,861,813	\$2,443,684	\$6,418,129	\$29,205,000	\$6,800,000	\$22,405,000
k. Miscellaneous	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>l. SUBTOTAL (add a through k)</b>	\$96,793,607	\$34,253,445	\$62,540,162	\$9,993,807	\$3,591,143	\$6,418,129	\$33,119,428	\$8,299,428	\$24,820,000
m. Contingencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>n. TOTALS (sum of l and m)</b>	\$96,793,607	\$34,253,445	\$62,540,162	\$9,993,807	\$3,591,143	\$6,418,129	\$33,119,428	\$8,299,428	\$24,820,000

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