

RECIPIENT NAME:MCNC

AWARD NUMBER: NT10BIX5570120

DATE: 08/20/2012

OMB CONTROL NUMBER: 0660-0037

EXPIRATION DATE: 12/31/2013

### 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>  NT10BIX5570120	<b>3. DUNS Number</b>  018946590
<b>4. Recipient Organization</b>  MCNC 3021 Cornwallis Road, Research Triangle Park, NC 27709-2889		
<b>5. Current Reporting Period End Date (MM/DD/YYYY)</b>  06-30-2012	<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>  Patricia Moody  Chief Financial Officer	<b>7c. Telephone (area code, number and extension)</b>  9192481820	
	<b>7d. Email Address</b>  pmoody@mcnc.org	
<b>7b. Signature of Certifying Official</b>  Submitted Electronically	<b>7e. Date Report Submitted (MM/DD/YYYY):</b>  08-20-2012	

**Project Indicators (This Quarter)**

**1. Please describe significant project accomplishments completed during this quarter (600 words or less).**  
 Construction efforts this quarter remained brisk and was the focal point for efforts within the project. At the end of the quarter in aggregate we had built 840 miles of conduit, representing approximately 63% of the designed plant to be built, and deployed 540 miles of fiber within that conduit. We have now also completed the acquisition of 303 miles of fiber. By the end of the quarter, all relevant permitting had been completed for the most part, with the exception of final execution on a US Forest Service permit to build in Graham County, and a few isolated railroads. We anticipate all of these closing next quarter. During the quarter we began placing orders on much of the equipment that will operate the new network, and toward the end of the quarter had begun receiving that equipment to stage for future deployment. By the end of the quarter we had placed telecommunication huts on 15 of the locations that had been identified within the project and were beginning final acceptance of those in anticipation of fiber being built up to them.

**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	61	This number for completeness is based on dollars spent. We are about 7% behind the baseline presented at the start of the project. The reason for the variance is due less now to a slower start to construction than planned and more due to timing of billings. We believe the project relative to deployment plan is essentially on track, but billings received from the contractors has not been as timely as needed at the end of the quarter to meet the baseline. Over the next 1-2 quarters we believe we will see this number begin to be at baseline as we pick up the pace of construction in the summer months. At this point, we are not concerned with meeting expectations of the project and overall completion of 66% by end of July 2012 and 100% completion by July of 2013.
2b.	Environmental Assessment	100	This task is 100% complete for the project as approved in the application.
2c.	Network Design	100	This task is 100% complete for the project as approved in the application.
2d.	Rights of Way	100	This task is 100% complete for the project as approved in the application
2e.	Construction Permits and Other Approvals	100	This task is 100% complete for the project as approved in the application
2f.	Site Preparation	83	By the end of the quarter, 15 of the 18 planned telecommunication huts were on the ground and placed. All design work on the others was complete and waiting start dates relative to project needs. The construction cycle of these was a bit slower than anticipated. At this point we are well ahead of baseline and anticipate full completion by end of the December reporting quarter.
2g.	Equipment Procurement	64	During the quarter we made significant purchases after finalizing selection of the vendor for equipment. At the end of the quarter much of this equipment had started to arrive and we are now ahead of the 51% projected in the baseline.
2h.	Network Build (all components - owned, leased, IRU, etc)	60	This number (60% completeness) is based on dollars spent, slightly ahead of our 58% established in baseline. Relative to judging our build "completeness", by the end of the quarter our firm fiber total completed within the project was 903 miles. Of this, 60 miles were existing MCNC fibers to be placed into the project; 303 from finalized IRU's and 540 from completed new builds. This is approximately 53% of the anticipated 1704 miles of the final network. In analyzing conduit miles constructed, we could reasonably increase this number to a total of 1171 or about 69% of the anticipated project total. At this point, we are slightly ahead of baseline established for the project for dollars and miles and do not have concern with completing the project on time.

	Milestone	Percent Complete	Narrative (describe reasons for any variance from baseline plan or subsequent written updates provided to your program officer)
	2i. Equipment Deployment	1	The delay in equipment deployment is tied to no complete sections of fiber being built as well as slower than anticipated selection of the equipment vendor. While our baseline called for 50%, we believe that our baseline was forecasted too aggressively when it was completed. Now that the first span is nearing final acceptance, we anticipate deployment of the equipment to begin in earnest during the September reporting quarter, and we should be near baseline by the end of the December 2012 reporting quarter, however this activity could slip toward the March 2013 reporting quarter to be ahead.
	2j. Network Testing	57	Slightly below baseline of 58%, but well within schedule. We test fibers as they complete and are spliced, as well as when obtained. We have no concerns with being right at baseline as of this report.
	2k. Other (please specify): N/A	0	N/A

**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).**

Challenges during the quarter remain centered around ensuring that all material for the construction efforts reach the field in a timely fashion. In addition we are now starting to get in to the more challenging parts of the build, geography wise, and construction in those areas has proven to be slower as anticipated. We are still on pace to complete the project, however, and have no concerns about this based on when we began the construction effort and couldn't be more pleased with where we are.

**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	540	This represents the number of miles of fiber actually placed, which is below the baseline of 780 miles forecasted. We have constructed 840 miles of conduit, and because of this we are not concerned about being behind at this point. A slower start to construction by both MCNC and ERC is the primary driver for lower number to baseline. We expect to fully recover from this by the end of fourth quarter of 2012.
New network miles leased	303	We are ahead of baseline on this metric. Formal agreements with Zayo, BREMCO, Skyline, Pangea, ERC, Country Cable, French Broad Electric Membership Corporation and Greenlight have been completed to account for these totals. These represent planned IRU acquisitions from the original proposal, as well as some approved during project by NTIA.
Existing network miles upgraded	60	60 miles of existing fiber are secured and ready to be lit when complementary fiber is completed in the project. This fiber will be used to tie the BTOP2 construction together to the existing North Carolina Research and Education network.
Existing network miles leased	0	N/A
Number of miles of new fiber (aerial or underground)	540	We are below baseline of 993. Baseline contained acquired infeasible right to use miles as well, in error, and thus we will be below baseline for this and all future reports.
Number of new wireless links	0	N/A
Number of new towers	0	N/A

Indicator	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
Number of new and/or upgraded interconnection points	1,243	Ahead of baseline due to number attributable to IRU's and the builds. Interconnect points occur at a minimum of roughly every one mile along the new construction.

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:

There are no signed agreements at this time; however, there are many discussions occurring between our marketing partner ECC Technologies and various carriers about access to the round 2 route. Feedback we are receiving is that as some regions of the network complete interest will pick up. We expect to be able to report some closed deals by end of Q2Y3.

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:

None available at this time. We anticipate a carrier to gain access in the route in the future, who will offer a full array of telecom services. To our CAI constituents, we will be offering IP service up to 10Gbps, lambda (circuit) services, as well as dark fiber under lease and or IRU as requested.

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).

Not applicable at this time.

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	We forecasted agreements too soon in our baseline based on completion cycle of the build. While it's hard to forecast when any agreements will be signed, we are encouraged by discussions our marketing firm is having with potential carriers. Due to planned completion dates of specific routes, as well as ongoing discussions by our marketing firm with folks interested in those routes, we anticipate being back on schedule to baseline by Q1Y3.
	Providers with signed agreements receiving improved access	0	We forecasted agreements too soon in our baseline based on completion cycle of the build. While it's hard to forecast when any agreements will be signed, we are encouraged by discussions our marketing firm is having with potential carriers. Due to planned completion dates of specific routes, as well as ongoing discussions by our marketing firm with folks interested in those routes, we anticipate being back on schedule to baseline by Q1Y3.

Subscriber Type	Access Type	Total	Narrative (describe your reasons for any variance from the baseline plan or any other relevant information)
	Providers with signed agreements receiving access to dark fiber	0	We forecasted agreements too soon in our baseline based on completion cycle of the build. While it's hard to forecast when any agreements will be signed, we are encouraged by discussions our marketing firm is having with potential carriers. Due to planned completion dates of specific routes, as well as ongoing discussions by our marketing firm with folks interested in those routes, we anticipate being back on schedule to baseline by Q1Y3.
	Please identify the speed tiers that are available and the number of subscribers for each	0	We forecasted agreements too soon in our baseline based on completion cycle of the build. While it's hard to forecast when any agreements will be signed, we are encouraged by discussions our marketing firm is having with potential carriers. Due to planned completion dates of specific routes, as well as ongoing discussions by our marketing firm with folks interested in those routes, we anticipate being back on schedule to baseline by Q1Y3.
Community Anchor Institutions (including Government institutions)	Total subscribers served	52	We are significantly ahead of baseline on this based on number of CAI's we have now built fiber to. At this point we have not turned service on to them due to timing of deployment in the core or their ability to sign a contract at this time, but the fiber has been deployed.
	Subscribers receiving new access	52	We are significantly ahead of baseline on this based on number of CAI's we have now built fiber to. At this point we have not turned service on to them due to timing of deployment in the core or their ability to sign a contract at this time, but the fiber has been deployed.
	Subscribers receiving improved access	0	In error we forecasted in our baseline for improved service to CAI's. Given that the CAI's outlined in our proposal included all new builds for new services, these estimates in the baseline were wrong. This metric will be 0 for all future reports, and due to the continued forecasting error, a variance to baseline in all future reports.
	Please identify the speed tiers that are available and the number or subscribers for each	1	Service will be provisioned to these locations at 1Gbps. As needed and/or requested by the users, the capability can grow to 10Gbps.
Residential / Households	Entities passed	0	N/A
	Total subscribers served	0	N/A
	Subscribers receiving new access	0	N/A
	Subscribers receiving improved access	0	N/A
	Please identify the speed tiers that are available and the number of subscribers for each	0	N/A
Businesses	Entities passed	0	N/A
	Total subscribers served	0	N/A
	Subscribers receiving new access	0	N/A
	Subscribers receiving improved access	0	N/A
	Please identify the speed tiers that are available and the number of subscribers for each	0	N/A

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

Our network, once fully deployed, will enable service offerings of 1Gbps to 100Gbps as required. The optronics we will deploy will have tremendous growth capability based on the road maps presented to us by the vendor of the equipment. Our willingness and ability to lease dark fiber to CAI's between their respective institutions in a confined geography we are hearing will be received well.

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
Carver Branch Library	Greenville	Public Library	No	BTOP funds enabled the purchase of existing fiber under IRU to this location. We will be using the fiber to provide up to 1Gbps service to this location.
Central Piedmont Community College North Campus	Huntersville	Community College	No	BTOP funds enabled the purchase of existing fiber under IRU to this location. We will be using the fiber to provide up to 1Gbps service to this location.
Fayetteville State University	Fayetteville	University	Yes	BTOP funds enabled the purchase of existing fiber under IRU to this location. We will be using the fiber to provide up to 10Gbps service to this location.
Fayetteville Tech Community College	Fayetteville	Community College	Yes	BTOP funds enabled the purchase of existing fiber under IRU to this location. We will be using the fiber to provide up to 1Gbps service to this location.
New Port Public Library	New Port	Public Library	No	BTOP funds enabled the purchase of existing fiber under IRU to this location. We will be using the fiber to provide up to 1Gbps service to this location.
Swansboro Branch Library	Swansboro	Public Library	No	BTOP funds enabled the purchase of existing fiber under IRU to this location. We will be using the fiber to provide up to 1Gbps service to this location.
Vanceboro Craven County Public Library	Vanceboro	Public Library	No	BTOP funds enabled the purchase of existing fiber under IRU to this location. We will be using the fiber to provide up to 1Gbps service to this location.
Granite Falls Library-Gonn Memorial	Granite Falls	Public Library	No	BTOP funds enabled the purchase of existing fiber under IRU to this location. We will be using the fiber to provide up to 1Gbps service to this location.
Cleveland Community College	Shelby	Community College	Yes	BTOP funds enabled the purchase of existing fiber under IRU to this location. We will be using the fiber to provide up to 1Gbps service to this location.
Haywood County Public Library-Canton	Canton	Public Library	Yes	BTOP funds enabled the purchase of existing fiber under IRU to this location. We will be using the fiber to provide up to 1Gbps service to this location.
Saluda Public Library	Saluda	Public Library	No	BTOP funds enabled the purchase of existing fiber under IRU to this location. We will be using the fiber to provide up to 1Gbps service to this location.
Asheville-Buncombe Technical Community College-Madison	Madison	Community College	Yes	BTOP funds enabled the purchase of existing fiber under IRU to this location. We will be using the fiber to provide up to 1Gbps service to this location.
Braswell Memorial Public Library	Rocky Mount	Public Library	Yes	BTOP funds enabled the purchase of existing fiber under IRU to this location. We will be using the fiber to provide up to 1Gbps service to this location.
Edgecombe County Memorial Library	Tarboro	Public Library	Yes	BTOP funds enabled the purchase of existing fiber under IRU to this location. We will be using the fiber to provide up to 1Gbps service to this location.
South Piedmont Community College-Polkton	Polkton	Community College	No	BTOP funds enabled the purchase of existing fiber under IRU to this location. We will be using the fiber to provide up to 1Gbps service to this location.

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
Union County Schools	Monroe	Public School District	Yes	BTOP funds enabled the purchase of existing fiber under IRU to this location. We will be using the fiber to provide up to 1Gbps service to this location.
Union County Public Library	Monroe	Public Library	No	BTOP funds enabled the purchase of existing fiber under IRU to this location. We will be using the fiber to provide up to 1Gbps service to this location.
Union West Public Library	Indian Trail	Public Library	No	BTOP funds enabled the purchase of existing fiber under IRU to this location. We will be using the fiber to provide up to 1Gbps service to this location.
South Piedmont Community College	Monroe	Community College	Yes	BTOP funds enabled the purchase of existing fiber under IRU to this location. We will be using the fiber to provide up to 1Gbps service to this location.
Southeastern Community College	Whiteville	Community College	Yes	BTOP funds enabled the purchase of existing fiber under IRU to this location. We will be using the fiber to provide up to 1Gbps service to this location.
Brunswick Community College	Bolivia	Community College	Yes	BTOP funds enabled the purchase of existing fiber under IRU to this location. We will be using the fiber to provide up to 1Gbps service to this location.
Columbus County Schools	Whiteville	Public School District	Yes	BTOP funds enabled the purchase of existing fiber under IRU to this location. We will be using the fiber to provide up to 1Gbps service to this location.

**Project Indicators (Next Quarter)**

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

We plan to continue full speed construction efforts and likely will complete a minimum of another 200 miles of conduit construction and 400 miles of fiber placement. Installation efforts of equipment will start on those backbone and CAI segments that will have had construction completed to them. We anticipate being at or ahead of baseline of 75 CAI's with new fiber. We are hopeful that we may close one fiber agreement with a carrier. At this point we will be looking to simply make major strides in final execution of all the construction related to the project leading in to the last quarter of the calendar year.

**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	80	Based on our baseline projection of 81%, we will be slightly below baseline, but essentially right on schedule. No concerns at this time with being able to deliver fully on the project.
2b.	Environmental Assessment	100	We are forecasting this activity will be completed.
2c.	Network Design	100	We are forecasting this activity will be completed.
2d.	Rights of Way	100	We are forecasting this activity will be completed.
2e.	Construction Permits and Other Approvals	100	We are forecasting this activity will be completed.
2f.	Site Preparation	100	We are forecasting this activity will be completed.
2g.	Equipment Procurement	100	We are forecasting this activity will be completed.
2h.	Network Build (all components - owned, leased, IRU, etc.)	77	We are forecasting at being ahead of baseline (71%) by the end of the next reporting quarter
2i.	Equipment Deployment	33	While we will still be below baseline, activity will start picking up in the last quarter of the year and we anticipate being back on baseline by Y3Q2. The variance to baseline here is solely tied to the delay in time of ordering equipment to when we forecasted.

	Milestone	Planned Percent Complete	Narrative (describe reasons for any variance from baseline plan or any other relevant information)
2j.	Network Testing	77	We have tied network testing to network miles acquired or built, and as such we will be slightly ahead of baseline established of 71%.
2k.	Other (please specify): N/A	0	N/A

**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).**

At this time we do not foresee any challenges beyond keeping the crews focused and managing the build. We anticipate making a big push in to the fall on construction so as to be done by first quarter of calendar 2013. There are certain regions of the build where we need to make strong efforts on construction in advance of the winter months, primarily the northwestern portions of the state, and those efforts will become demanding. Beyond that, continued timely delivery of our materials by our outside plant vendor to our construction crews is the most important thing facing us.



**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	\$757,080	\$183,865	\$573,215	\$941,811	\$228,729	\$713,082	\$996,811	\$242,086	\$754,725
b. Land, structures, right-of-ways, appraisals, etc.	\$5,692,533	\$1,920,062	\$3,772,471	\$2,911,273	\$808,252	\$2,103,021	\$5,692,533	\$1,483,712	\$4,208,821
c. Relocation expenses and payments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
d. Architectural and engineering fees	\$7,425,748	\$1,803,424	\$5,622,324	\$5,278,479	\$1,281,936	\$3,996,543	\$6,000,000	\$1,457,165	\$4,542,835
e. Other architectural and engineering fees	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
f. Project inspection fees	\$7,205	\$1,750	\$5,455	\$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	\$85,037,468	\$24,683,797	\$60,353,671	\$50,698,471	\$17,214,320	\$33,484,151	\$65,698,471	\$20,857,233	\$44,841,238
j. Equipment	\$6,971,935	\$1,693,210	\$5,278,725	\$4,321,486	\$1,049,520	\$3,271,966	\$6,000,000	\$1,457,165	\$4,542,835
k. Miscellaneous	\$200,000	\$48,572	\$151,428	\$303,845	\$73,792	\$230,053	\$350,000	\$85,001	\$264,999
<b>l. SUBTOTAL (add a through k)</b>	\$106,091,969	\$30,334,680	\$75,757,289	\$64,455,365	\$20,656,549	\$43,798,816	\$84,737,815	\$25,582,362	\$59,155,453
m. Contingencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>n. TOTALS (sum of l and m)</b>	\$106,091,969	\$30,334,680	\$75,757,289	\$64,455,365	\$20,656,549	\$43,798,816	\$84,737,815	\$25,582,362	\$59,155,453

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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