



networkMaryland™ Advisory Group
October, 2013
The Judicial Education and Conference Center
2011D Commerce Park Drive, Annapolis
Annapolis, Maryland



Attendees:

Advisory Group

Paul Thorn
Derek Wheeler
John Gallagher
Ron Ward (Proxy)
Mike Walsh

Guest

Tim Riegert
Paul Lennon
Greg Talley
Jeff Merrill
David Parsha
Michele Workman
Mark Gister
Andre Stevens
Ed Bogdan

DoIT

Dave Mangrum
Denis McElligott
Jean Boyer
Gary Moulton
Cheryl Lincoln

• Welcome & Introductions

- Jean Boyer called the meeting to order.

• Introductions

- Dave Mangrum – Director of Networks Division
- Introduction of the networkMaryland™ team
- Quorum established.
 - July Meeting Minutes to be voted on via e-mail.

• New Business

- Meeting Format
 - Jean Boyer opened the meeting and explained that the format of the meeting has changed. She noted a difference in the agenda and explained that each subject matter expert will speak to his or her own section of the agenda..
- Dave Mangrum asked if anybody had any new business to bring up but there was no response so it was noted that there was no new business to discuss

• State of the Network

- SLA Reports
 - We had some outages related to power hits and some Verizon outages that were ATM based.
 - We had a Severity 1 “Test” ticket for September that was opened as part of some Remedy testing. It greatly impacted the numbers for the month.
 - David Parsha also mentioned that there were some problems with fiber cuts.

• Status of Projects

- Equinix

- Jean Boyer discussed the status of the Equinix peering. We are now peered with a number of applications including Pandora and Twitter.
- Jean showed and discussed the graphs which indicate an increase in bandwidth use of Equinix.
- David Parsha mentioned that we are working through some issues that have cropped up with some of the peers.
- Provisioning
 - We are adding a number of subscribers that are coming on board thanks to the availability of OMBN fiber. They include Calvert County (Government and BoE), St. Mary's County (Government and BOE) and Somerset County BoE.
 - Somerset County BoE is already connected and the others are pending.
 - We expect to add more subscribers as we continue to connect up to the OMBN fiber.
 - Gary discussed the overall churn of provisioning activity and noted that we actually saw an overall increase in L2 circuits for the most recent time period. This was due to the fact that the FRASI decommission project has been completed so we didn't process as many decommission orders this time.
- One Maryland Broadband Network (OMBN)
 - The amount of fiber that's been added to the network has increased several fold so fiber problems have increased tremendously.
 - *Paul Lennon explained that there is a lot of coordination needed to troubleshoot the network to determine if it is a fiber issue.*
 - The OMBN program ended August 31, 2013.
 - The amount of fiber the State is responsible for has increased.
 - 34 Backbone Nodes were built.
 - 63% of the 10 GB links were completed as we have not received the information from the counties for ICBN fiber.
 - Equipment is installed and operational.
 - 10 Gbps Southern ring is completed, the 10 Gbps Eastern shore ring is completed and the 20 Gbps UMCP to Oakland ring is completed.
 - The backbone build out for the Eastern shore has been completed for the most part but the Northern portion that runs up to Elkton is still pending. This is dependent on one of our resource share partners.
 - Work is still in progress for the Western ring that runs from Cumberland back to Oxon Hill.
 - The OMBN Metro-E Project, everything is deployed in Garrett and St. Mary's County, and the next counties on the list are Allegany, Calvert, Cecil and Washington.
 - The order of deployment is based on the number of CAIs per county.
 - Pre-staging is occurring presently and we will be installing new services and disconnecting the legacy services later in the deployment timeline.
 - *Ron Ward mentioned that he would like to leave EE circuits in some sites (LaPlata for example) and not disconnect them since MDOT is deploying its own fiber in some places where networkMaryland is deploying its fiber so the MDOT fiber and networkMaryland fiber will be a single point of failure. He wants the EE circuit to be left in place as a back-up.*
 - *Gary Moulton mentioned that a list of these sites would be helpful.*

- *Mike Walsh asked about responding to outages. For example, will there be more crews available? David Parsha mentioned that we'll be able to respond quickly to fiber outages, and we are already doing that with some OMBN- related outages.*
 - *Denis McElligott mentioned that we a member of Miss Utility Maryland so we're on top of the outages.*
- *A question was also asked about the cost of services that are migrated over to fiber. Both Gary Moulton and Dave Mangrum mentioned that service costs will drop once leased-based services are move over to fiber. This is the case since networkMaryland will no longer be paying for leased services once the circuit's been migrated to fiber.*
- Quality of Service (QoS)
 - We were planning to do a pilot for QoS.
 - Please note that QoS will be created for VPRN customers only. It will not be used for L2 circuits.
- Circuit Reconciliation
 - With the FRASI circuits being decommissioned, we have also decommissioned 5 of the 9 ATM OC3 circuits that had been used for FRASI connections.
 - All remaining FRASI service is now aggregated over the 4 remaining ATM OC3 circuits.
 - The final date for the end of Frame Relay Service from Verizon is 12/31/14.
 - We need to migrate all FRASI connections off the Frame Relay circuits prior to this date.
 - All agencies should feel free to reach out to DoIT for assistance.
 - The summary of remaining circuits is as follows:
 - 196 FRASI circuits.
 - 36 FRASIs will be replaced with an Metro-Ethernet solution.
 - 18 agencies are involved.
 - We will be migrating to Ethernet handoffs exclusively which simplify configuration of the customer WAN interface.
- Fiber Laterals
 - David Parsha discussed fiber projects that are related to provisioning requests. He mentioned that we discuss these projects weekly, on an on-going basis, and we will collaborate with subscribers to get them onto fiber.
 - About 170 CAI sites where networkMaryland subscribers are located have been identified, and there are additional sites as well. Subscribers should feel free to collaborate with networkMaryland to get fiber connected
 - Paul Lennon mentioned that Frederick County has been a great partner for fiber resources, and David Parsha added that we'll keep the process fresh for building laterals wherever possible.
 - *Mike Walsh asked what the percentage is of pole-based fiber versus underground fiber. No one had an exact answer but Dave Mangrum said he is guessing that it's about 60% underground versus 40% aerial.*
 - *Mike also asked about weather events affecting service and whether there's a plan in place to react to these events. David Parsha said we*

have partnerships with other companies and we can get all of them to dispatch out to do repairs.

- *Denis McElligott said that we also have a process in place to do emergency procurements if a major event, such as Super Storm Sandy, would occur.*
- County MOU's
 - 500 miles of fiber have been installed throughout all the OMBN counties.
 - We will be providing dark fiber and, in some case networkMaryland services, to the counties.
 - We have begun to execute 9 MOUs and 5 have been completed with dark fiber and/or networkMaryland services in place.
 - In the case of Somerset County Board of Education, networkMaryland services were installed prior to the start of the school year.
 - *Ed Bogdan asked about the status of Baltimore County. Denis responded by saying for the ICBN counties, which include the central Maryland counties, we are further behind with more discovery involved. Conversations are taking place. This will take longer but we are laying the ground work.*
 - Agreements will be worked on county by county.
- **Other Business**
- **Closing Questions or Comments**
 - The next AG Meeting will take place on January 21, 2014.
- **Meeting adjourned**