



networkMaryland™ Advisory Group
November, 2008
45 Calvert Street
Annapolis, Maryland



Attendees:

Advisory Group

Michael Springfield
Dean Zarriello
Ron Ward
Steve Golaner
Nate Archey
Paul Thorn
Norwin Malmberg
Chuck Bristow

Guest

Greg Faries
Jim Millette
Robert Bowman

DOIT

Elliot Schlanger
Gregory Urban
Tim Kwong
Tia Johnson
Gary Moulton
Cheryl Lincoln
Joe Scher

- Welcome & Introductions
 - Greg Urban called the meeting to order at 10:07 AM.
- Introductions
 - Elliot Schlanger – Chief of Information Technology
 - Gregory Urban – Director, networkMaryland™
 - Quorum established
 - There are 13 voting members
 - 6 voting members makes a quorum.
 - Introduction of guests
 - Greg Faries, Performance Technology Group
 - Jim Millette, Skyline Network Engineering.
 - Robert Bowman, Cisco
 - Introduction of the networkMaryland™ team
 - Cheryl Lincoln
 - Tim Kwong
 - Gary Moulton
 - Joe Scher
 - Tia McCoy – Johnson
- Meeting Minutes Approval
 - September 2008
 - Typo on page five in response to question regarding CACTI: Accessible not Assessable.
 - Clarification needed on the response:
 - Q** *Does not having a plan mean that we don't have a strategy on how and when we are going to do it, or does it mean we have no intention of ever doing it?*
 - A** *We would like to do it but we don't have a plan to do it. This is something that we would like to do I just don't think that we are capable at this point in time.*
 - Q** *Are we not capable from a budget perspective or is it resources or is it a technical disadvantage?*
 - A** *It is resources at this point.*
 - Q** *Is there any way we could work together and possible share the technical resources?*
 - A** *At this point the State does not own the tools to do it so we would be reliant on the contractor. But there may be something we could do. It is something we (networkMaryland™) should look into it.*
 - Motion made by Chuck Bristow for the approval of the minutes
 - Seconded by Mike Springfield
 - No one opposed.
 - Minutes passed unanimously.
- State Budget
 - Continue fiscal responsibility and look for additional ways to reduce costs to the State
 - All State Agencies and the Local Government are doing what ever they can to address the situation individually.
 - There is no direct affect on the Program, however we are looking at being more efficient, and we are looking at projects that can be deferred, and aren't customer service impacting and won't put us in a position where we can't offer the services that we need to offer.

Q *Can any of the cost containment on network Maryland's™ capital budget or operating budget affect the refresh schedule either hardware or software?*

A *No.*

- **New ISP Contract**
 - Awarded to Atlantech Online
 - Located in Silver Spring Maryland
 - They were low bid
 - 200 Mbps circuit delivered at UMCP delivered using leased Dark Fiber
 - Redundant fiber paths from UMCP to Atlantech POP
 - This replaces Qwest in Baltimore
 - Looking to move UMATS feed to Baltimore from UMCP
 - This will give us capacity in both College Park and Baltimore.
 - The Max Group would be available for turn-up in a disaster recovery instance.
- **Ethernet Everywhere Update**
 - New POP Hardware Purchased
 - What we finalized a mid-term deployment and can last indefinitely. We will be looking at it as capacity and demand grows.
 - Overture 5100 & Cisco ONS Transmux DS-3 cards
 - We will be using a single vendor for Ethernet Everywhere specific hardware.
 - We are 100% efficient on the Telco side.
 - Equipment able to provide required flexibility (no 8-bundle limitations per DS3 circuit)
 - Integrates well within our existing ONS platforms
 - Will be deployed in all four LATAs.
 - SONET equipment (Transmux cards) scheduled to arrive in mid-December
 - Roll-out of services have begun
 - Deployments in Western and Baltimore LATAs have begun
 - Eastern Shore deployments begin next week

Q *Does the Overture, at the core site handle only one DS3?*

A *No, it handles three.*

Q *So you won't be buying a lot of these things in order to terminate everything?*

A *That's correct. The most we have at any location is two.*

- **Operational Subscribers**
 - 77 Operational Subscribers
 - No new subscribers have been added since the last meeting.
- **Circuit Breakdown**
 - 86 ISP Circuits (+2)
 - 89 SwGI Circuits (+0)
 - 1399 Layer 2 Circuits (+15)
 - 10 VPN Subscriber Connections (+0)
- **Subscriber Provisioning**
 - 44 circuits are currently in the subscriber's testing/implementation phase
 - 19 new circuits have been provisioned since the last meeting
 - 48 circuits have been accepted by the subscriber since the last meeting

- **Installed Circuits**
 - We are at 1399 installed circuits.
 - The number of pending circuits is below 200.
- **Executive Branch**
 - We are still getting a healthy amount of requests for networkMaryland™ services.
- **Non-Executive Branch**
 - We are still getting a healthy amount of request for networkMaryland™ services.
- **Non-State Customers**
 - Anne Arundel County is consolidating their internet connections.
 - The College of Southern Maryland is increasing its internet connections and Layer two connections.
 - Charles County Government is increasing its internet connections.
 - Montgomery County wants to increase bandwidth on their current SwGI connection as well as a migration off of the existing ATM circuit and onto a MPLS gigabit Ethernet connection.
- **New Provisioning Activity**
 - *Ethernet Everywhere: Requests continues to pour in!*
 - Western LATA sites scheduled to be turned up by end of month
 - DHMH & MSDE: Services activated in Baltimore
 - DS3 circuit will be installed at 4201 Patterson Ave. to service MDoT & DHMH
 - Will be turned up by the end of this week.
 - MDoT: Submitted 13 requests (mostly Western LATA)
 - DPSCS: Submitted 10 requests during its first phase of deployment
 - We anticipate additional requests during subsequent phases of deployment.
 - OAH (Office of Administrative Hearings):
 - A single connection to carry both ISP & SwGI traffic.
 - Avoids purchasing two leased lines to receive both services.
 - MDA (Dept. of Agriculture): Submitted 38 requests, one for each of their remote offices.
 - We will be reporting to DBM, all transitions from FRASI to Ethernet Everywhere so that they can reduce their budget for the 0302 Object code.

Q Is DBM still waiting for the cost plug in for the three service of networkMaryland™ for the agencies for FY10. They've asked the agencies to use the appropriation for FY09. Do you know when the estimates for the FY10 budget will be ready?

A They are due the end of this month.

Q Does the net cost go down for the agency if you go switch to a single T1 from FRASI?

A The cost for a single T1 may be higher. The T1 circuit costs under the current contract are a little lower for shorter distances. T1s are distance sensitive.

- **Other Provisioning Activity**
 - Denton MSC
 - All provisioned circuits are marked Operational
 - Salisbury MSC
 - All provisioned circuits are marked Operational
 - Agencies partnering together to handle the physical cabling for connecting to the networkMaryland™ CPE.
 - Frederick County
 - Diverse ISP path for county
 - Waiting on FiberGate agreement to be signed
- **Operations**
 - Operational Improvements
 - Successfully migrated DoIT\DBM's L2 connection between Annapolis & Baltimore off of ATM & onto Ethernet\MPLS
 - Polycom Videoconferencing System was also migrated off of the Verizon ISDN network and uses this new connection today.
 - Reterminated DJS's networkMaryland™ services to a location with that has power backed up by a generator at 6 St. Paul Street.
 - Cisco platforms undergoing software upgrades over the next several weeks so that all devices will be running a consistent code base
 - This is just so that our devices can be unified into a consistent code base.
 - ISP transition to Atlantech underway. Turn-up will occur by end of this month. (Qwest contract ends in mid-December)
- **Performance Standards & Service Levels – July 2008**
 - The performance reports for Performance Technology Group (PTG).
 - RFP Section 2.9.1 Service Desk Tickets
 - (PTG) is supposed to meet the response time matrix for each reporting period for 98% of the service desk tickets initiated during the reporting period.
 - Incidents are categorized into three categories. Severity 1 would be Critical, which would affect multiple customers. Severity 2 would affect one customer. Severity 3 would be a minor alarm.
 - For the month of July there were no Severity 1 cases, 1 Severity 2 case and 10 Severity 3 cases. Based on the times listed in the matrices PTG has met the established requirements.
 - RFP Section 2.9.2 Fault Detection and Repair
 - PTG is supposed to follow the repair times measured from fault detection via management systems or customer notification to restoration of services.
 - 95% of service affecting outages repaired prior to 1st escalation has a statistic of 90.9%.
 - 98% of service affecting outages repaired prior to 2nd escalation has a statistic of 100%.

Q So they fell a bit short on the first escalation?

A Yes.

- RFP Section 2.9.3 Service Availability
 - Measures the availability to our core services: ISP, SwGI, and Layer 2 Services.
 - For the month of July has been very stable at 100%.

Q *For Service Availability are you only measuring unplanned outages?*

A *Yes. Maintenance windows are not included in those statistics.*

- **Performance Standards & Service Levels – August 2008**

- RFP Section 2.9.1 Service Desk Tickets
- RFP Section 2.9.2 Fault Detection and Repair
 - We see a drop here from last month.
 - We had to re-tool some of our network management systems.
- RFP Section 2.9.3 Service Availability

Q *Are there penalties associated with Service Level agreements?*

A *If the question is; Are there liquidated damages the answer is no. What they have to do is create a plan on how to meet the goals if the goals aren't met. They have produced plans on how to bring their performance to the contract minimums.*

Q *When you do these charts in the future will you please highlight the areas where there are deficiencies?*

A *Ok.*

Q *Shouldn't the exception from month to month be noted? What happened and what was the corrective action?*

A *Yes.*

Q *Is there anyway of determining who was affected when availability is not at 100%? Does that 99.82 mean that just the Eastern Shore was did not have access internet and SwGI and the rest of the State did? Or was it something that was state wide?*

A *We will work on a way of conveying that information.*

Q *Is the contractor responsible for response times or restoration times?*

A *They are both measured separately.*

- **Project Status**

- Migration from ATM to Native IP
- Phase V: MultiService Centers
 - Updating design – evaluating MPLS aware equipment at each MSC – Still evaluating hardware options
 - Schedule will be updated
- Phase VI: Last Mile (FRASI Replacement)
 - Ethernet Everywhere is expected to have a major role
 - Circuit aggregation equipment will support Ethernet Everywhere & clear channel circuits to customer owned CPE
 - No planning has begun
- BMAN Upgrade
 - Phase III: Redesign of Core in Baltimore
 - Project has been suspended due to lack of resources.
- Deployment of multi-cast capabilities on SWGI
 - Working with CHART to distribute video feeds to non-MDOT subscribers
 - Assist with development & lab testing of CHART video distribution
 - Assist deploying equipment at subscriber locations
 - Lab testing hardware and software versions
 - Requires upgrading all Juniper routers to latest code release

- World Trade Center (Anticipated completion: Jan 2009)
 - New PoP established to support DBED's new offices
 - SAILOR-provided fiber from WTC to 6 St. Paul
 - Established project plans and milestones to meet completion date
 - Equipment has been ordered
 - Also tied to the 217 E. Redwood St. BMAN equipment relocation
 - Coordinating with the Dept. of Disabilities and College Savings Plan of Maryland on their new connections to networkMaryland™
- Cambridge MAN (No status change)
 - Equipment has been received
 - Fiber installation in progress by Bay Country Communications
- Frederick MAN (No status change)
 - Pending FiberGate resource sharing agreement
 - Build a diverse fiber path & dual connect Frederick to UMCP/Hagerstown
- **Network Overview**
 - No changes
- **Fiber Projects**
 - St. Mary's County
 - Receive one pair of fiber from Leonardtown MSC to US301 connecting to La Plata via Level3 fiber.
 - Construction connecting State & Metrocast fiber on hold pending a new work order under the Cable and Wiring Master Contract.
 - MOU in review by county
 - Pikesville
 - Working with MSP, DPSCS, Baltimore County, and Baltimore City Police to build fiber along Reisterstown Road in the Pikesville Area
 - Ordering Verizon Ethernet services as interim solution
- **Other Business**
 - networkMaryland™ has been trying to come up with services to come with agencies to meet their mission.
 - There have been two agencies requesting a private Layer 3 routing domain as apposed the hub and spoke Layer 2.
 - This private Layer 3 would be just like SwGI but just for a single Agency to use.
 - We've presented a solution to the Judiciary.

Q Is Judiciary looking for this to add security or for performance?

A They are looking at it for cost and performance. They have video feeds and different sources that they are trying to distribute and they are also trying to do it for their DR planning as well.

- The technical portion is doable. We have that figured out.
- The operational aspect is always the harder part.
- The costing model we've come up with a way to price it in our current scheme. We will continue to asses it.
- If anyone has any interest in it please let us know.

Q How would you handle the agency having access into the routing equipment considering you are running it?

A We could create a virtual router on our side. And we'll have to run a BGP and OSPF.

Q You wouldn't be giving an agency access to your routers at all?

A No. The demarcation will remain the same but we will be sharing routing information.

Q How is this going to be cost effective to the customer? They are still going to need the last mile beyond networkMaryland™

A If we charge for a connection to the network like SwGI then let the customer route anywhere all they have is the physical port fee and the SwGI connection fee. So if they have a many to many relationship instead of having 50 Layer 2 circuits you just buying the connection and you have the SwGI fee for each of your locations.

Q Would they have to buy tail circuits as well?

A It would depend on whether they are on net or off net. Regardless of whether the customer uses us for Layer 2 or Layer 3 service they will have to buy the tail circuits if they are off net.

Q Is Judiciary currently receiving Layer 2 services? Do they intend to stop receiving Layer 2 services when they start receiving Layer 3 services?

A They do receive ATM layer 2 services. I do believe they will drop the Layer 2 services.

- Advisory Group Charter Changes
 - It refers to us as DBM.
 - A proposed change in meeting frequency. From every other month to quarterly.
 - By-laws changes must be made by a Standing committee.
 - Volunteers to join the committee:
 - Norwin Malmberg
 - Mike Springfield
 - Chuck Bristow
- networkMaryland™ Engineering Committee meeting
- December 8th, 2008, 1:30 PM @ UMBC Technology Center
- Merged with UMATS engineering meeting
- Closing Questions or Comments
- Meeting adjourned at 11:15 AM