networkMaryland™ Advisory Group
September 16, 2008
45 Calvert Street
Annapolis, Maryland

Attendees:

Advisory Group

Sidney Drake
Ron Ward
Mike Springfield
John Gallagher
Norwin Malmberg
Paul Thorn
Randy Reynolds

Guest

Ed Quattrone
Greg Faries
Jason Ross
Paul Lennon

DOIT

Greg Urban
Tim Kwong
Gary Moulton
Cheryl Lincoln
Elliot Schlanger

- Welcome & Introductions
  - Greg Urban called the meeting to order at 10:06 AM.
- Introductions
  - Gregory Urban – Director, networkMaryland™
  - Elliot Schlanger – Chief of Information Technology
  - Guests/Visitors
    - Greg Faries, (Performance Technology Group), Jason Ross, (Skyline Network Engineering), Ed Quattrone, (Verizon) Paul Lennon, (Computer Sciences Corporation)
- **New Business**
  - Meeting Minutes Approval
    - July 2008
      - Norwin Malmberg motioned
      - John Gallagher seconded the motion
      - Minutes unanimously approved.
  - Transition to PTG
    - Completed.
    - Payment approved for transition work.
    - Projects are re-engaged.

Q Does the contract end in 2011?
  A 2010, this coincides with the end of the CATS contract. No task order under CATS can go longer than the actual master contract. By December 31, 2010 we have to have transitioned off of the current contract.
  - State Budget
    - Continue fiscal responsibility and look for additional ways to reduce costs to the State
    - There are shortfalls for the coming year.
    - Ensure that networkMaryland™ continues to reduce costs to the State.
    - Operations is from the reimbursable budget.
    - Budget cuts will affect subscribers which may affect networkMaryland™.

Q Are networkMaryland™ operations self supporting?
  A   Yes, our group is a reimbursable agency. We collect from our subscribers, the majority of which are State Government.

Q So you (networkMaryland™) may not see cuts to the operational budget but the capital budge maybe cut?
  A We don't have a capital budget; we have old capital money that we are still using. When the budget cuts were made to DOIT they were made to the Major IT project fund and the General fund. We are reimbursable funded so we (networkMaryland™) were not affected.

Q So the budget cuts aren't going to directly affect you (networkMaryland™), but you (networkMaryland™) are looking to help other agencies who are going to be affected?
  A The budget cuts are going to affect the Agencies which will affect us (networkMaryland™).

Q What are your (networkMaryland™) plans for next year with the 3% reduction in cost. How is that going to impact you (networkMaryland™)?
  A We submitted a budget that did not go down by 3%. We will have to follow the lead of DBM. We have to try to offer some suggestions that will help in

a way that allows agencies to maintain their business functions. This year we (networkMaryland™) reduced the cost to subscribers in general. Hopefully we will continue to be able to do that.

- New ISP Contract
  - · Award recommendation completed.
  - · There was a protest but it's been resolved.
  - · Award recommendation given to Elliot.
    - ° Waiting for his approval.
  - · Our ISP Services costs will be lower with this new contract.

Q Do you anticipate cutting our ISP rates based on the new contract?

    A The rates were cut in 2009 dramatically. So we don't anticipate another cut until 2010. The plan is to continue to reduce it.

- Ethernet Everywhere Update
  - · Problems with POP hardware (Turin TPE-1200)
    - ° Issues with stability and management of equipment threatened delivery of robust service.
      - · The engineering issues rendered this device unsuitable for large scale deployment.
    - ° Equipment was returned to the vendor (full refund) with complete support from reseller and vendor.
    - ° Re-evaluating equipment for near-term/long term solution
      - · We have been working with Overture on this.
      - · We have some devices in Baltimore, which we can use in the short term.
    - ° Turning up 8 Baltimore LATA orders.
    - ° Expecting hardware specification for Hagerstown and Easton by the end of the month.
      - · We are testing devices to be used in Hagerstown and for Easton.
      - · We have about 70 site orders or projected orders currently.

Q Does the equipment at the end user site work ok?

    A It works great!

- State of the Network
  - **Operational Subscribers**
    - · 77 Operational Subscribers (+1)
      - ° The change is the Garret County Public Schools.
- Circuit Breakdown
  - 84 ISP Circuits (+1)
    - · Again Garret County Public Schools
  - 89 SwGI Circuits (+1)
    - · The Register of Wills is the new subscriber.
    - · They are in the process of connecting their applications to communicate with JIS in Annapolis.
  - 1384 Layer 2 Circuits (-9)
    - · Agencies have been moving and closing some offices, therefore choosing to decommission some circuits.
    - · We have been getting new requests as well.
  - 10 VPN Subscriber Connections (+0)
- **Subscriber Provisioning**

- 95 circuits are currently in the subscriber's testing/implementation phase
  - A good portion of these circuits are due to the Ethernet Everywhere dilemma.
  - Until we find a more viable solution a those circuit will stay in the testing/implementation phase.
- 35 new circuits have been provisioned since the last meeting
- 18 circuits have been accepted by the subscriber since the last meeting
- **Installed Circuits**
  - There is a decrease of nine since the last Advisory Group meeting.
  - We (networkMaryland™) do anticipate breaking the 1800 mark by the end of this year.
- **Executive Branch**
  - The Department of Information Technology is now receiving Layer 2 services.
  - The Department of Agriculture is now receiving Layer 2 services.
  - The Department of Juvenile Services is now receiving Layer 2 and Internet services.
  - The Department of Public Service is now receiving Layer 2 service.
  - The Department of Health and Mental Hygiene is now receiving SwGI and Layer 2 services.
  - The Department of the State Police is now receiving Layer 2 services.
  - The Department of Transportation is now receiving Layer 2 services.
  - The Department of Natural Resources is now receiving Layer 2 services.
  - The Department of Education is now receiving Layer 2 services.
  - The Department of Planning is now receiving Internet services.
- **Non-Executive Branch**
  - The State Board of Elections has been slowly increasing each of their remote sites in preparation for the General Election.
  - The Judiciary is receiving Layer 2 service.
  - The Office for Children is receiving Internet service.
  - The Department of Assessments and Taxation is receiving Layer 2 services.
  - College Savings Plans of Maryland is the process of expanding their campus connection to Prince Frederick in Calvert County for connectivity in their backbone at LaPlata is receiving Internet service.
  - The Register of Wills is continuing their Internet service as well as receiving SwGI service.
- **Non-State Customers**
  - The Baltimore City State's Attorney's Office's Internet bandwidth has been increased.
  - Garret County Public Schools is receiving Internet services.
  - The College of Southern Maryland is receiving Layer 2 services.
- **New Provisioning Activity**
  - Ethernet Everywhere: Requests continues to pour in!
    - DHMH & MSDE: Services activated in Baltimore
    - Other Baltimore Sites (MSP, DPSCS) scheduled to be turned up by end of September
    - DHR: Plans to connect their data center @ 1100 Eastern Blvd.
      - They want to dual hub their enterprise network into their data center.
    - 70 orders received or projected by agencies for FY2009
  - Register of Wills
    - First-time SwGI subscriber for connection to JIS
  - DPSCS:

- Established a colocation router for the Baltimore LATA at 6 St. Paul.
  - In the past they aggregated a lot of their Baltimore LATA into their Pikesville data center.
  - They are now trying to replicate their Enterprise model throughout the State where they have colocation routers at College Park, Easton, and Hagerstown.
- Denton MSC
  - Provisioning of on-net circuits completed & CAFs distributed
  - All provisioned circuits will be Operational at end of month.
- Salisbury MSC
  - Provisioning of on-net circuits completed & CAFs distributed
  - All provisioned circuits will be Operational at end of month.
- Frederick County
  - Diverse ISP path for county
  - Waiting on FiberGate agreement to be signed.

- **Operations**
  - Operational Improvements
    - Implemented resource graphing tool (CACTI) to present bandwidth utilization reports to subscribers.
    - Implemented Speedtest as an internal bandwidth testing tool.
      - This allows agencies to gage how much true bandwidth they are getting via their internet connection.
    - Implement disk mirroring and a more robust backup strategy for key network management system databases.

  Q Is CACTI assessable though a browser to the customer? Are there any plans to bring it to the customers?
  - **A It is assessable by browser but it is not assessable to the customer. There are no plans to bring it to subscribers at this time.**

- **Status of Project**
  - There have not been a lot of status changes as our (networkMaryland™) primary focus has been operations and provisioning.
  - Migration from ATM to Native IP
    - Phase V: MultiService Centers
      - Updating design – evaluating MPLS aware equipment at each MSC.
      - Exploring 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
  - MPLS Provisioning Software
    - Dorado Redcell – Creating operational procedures.
  - BMAN Upgrade
    - Phase III: Redesign of core – t.b.d.
      - Reduce dependency on 6 St. Paul
      - Increase presence at 301 W. Preston for connectivity to core
      - Add SONET node at Preston St.
      - Redesign SONET ring for Annapolis/Baltimore/College Park

- ° Adding routing presence at Preston St
- ° New schedule being created
  - CHART Video
    - · Working with CHART to distribute video feeds to non-MDOT subscribers.
      - ° 7000 hours have been estimated for this effort.
    - · Assist with the development and lab testing of CHART video services and distribution
      - · This will be treated as a consulting services project.
      - · The majority of the funding will come from CHART.
    - · Assist deploying equipment at subscriber locations
    - · Deployment of multi-cast capabilities on SWGI

Q Is the first phase to do a proof of concept or are you (networkMaryland™) pretty sure that the technical aspects of this are pretty well sound and there is nothing really to prove out?

A The first phase is cost avoidance for MDOT. They are going to change the end points first, and then they will do a new delivery method. There will be a proof of concept with the new delivery method then deploy the new delivery method.

- World Trade Center (No status change)
  - · New PoP established initially to support DBED.
  - · Building redundant fiber connection to building.
  - · Need to market to other tenants in the building.
- 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 to the city.
  - · Dual connect Frederick to UMCP/Hagerstown

- **Network Overview**
  - Has not changed since the last meeting.
- **Fiber Projects**
  - St. Mary's County
    - · Receive one pair of fiber from Leonardtown MSC to US301 connecting to La Plata via Level3 fiber.
      - ° Working on the MOU. The task order should be released before the Advisory Group meeting.
    - · Construction connecting State & Metrocast fiber on hold pending a new work order under the Cable and Wiring Master Contract.
  - Pikesville
    - · Working with MSP, DPSCS, Baltimore County, and Baltimore City Police to build fiber along Reisterstown Road in the Pikesville Area.
      - ° DPSCS successfully got fiber to the Mitchell Courthouse.
    - · Still in planning / feasibility analysis
      - · They are still trying to figure out how to meet the most amount of need with a single build.
- **Other Business**
  - networkMarylandTM Engineering Committee meeting
  - October 13th, 2008, 1:30 PM @ UMBC Technology Center

- Merged with UMATS engineering meeting
- **Q** **Will you still do quarterly reporting on the performance of PTG, average close times and or response times of tickets?**
  - **A** **We'll record monthly stats and put it together on a quarterly basis.**
- **Other Business**
  - Remarks from Elliot
    - Confirms the budget crisis for next year.
    - FY10 has a far deeper ugly looking perspective.
    - We must be fiscally prudent and leverage technology to be more cost effective to deliver services to citizens and subscribers.
- Meeting adjourned at 10:54 AM