networkMaryland™ Advisory Group Meeting

April 17, 2012

Annapolis, MD

MEETING AGENDA

- Welcome & Introductions
- New Business
- State of the Network
- Status of Project
- Other Business

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WELCOME

- Introductions
- Gregory Urban: Deputy State CIO - Operations
- Guests/Visitors

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NEW BUSINESS

- Meeting Minutes Approval
  - January 2011

- Personnel Update

- Presence at Equinix
  - Part of the ISP Peering fabric
  - Access to more ISPs
  - Future redundant path to western Maryland

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NEW BUSINESS - ISP

- Rates reduced - bandwidth increased

Bandwidth (Mbps)	Cost/Month	NRC	Cost/Mbps
10	$ 150.00	$ -	$ 15.00
15	$ 225.00	$ -	$ 15.00
20	$ 300.00	$ -	$ 15.00
25	$ 375.00	$ -	$ 15.00
50	$ 725.00	$ -	$ 14.50
75	$ 1,050.00	$ -	$ 14.00
100	$ 1,300.00	$ -	$ 13.00
150	$ 1,875.00	$ -	$ 12.50
200	$ 2,400.00	$ -	$ 12.00
300	$ 3,450.00		$ 11.50
400	$ 4,400.00		$ 11.00
500	$ 5,250.00		$ 10.50
600	$ 6,000.00		$ 10.00
700	$ 6,650.00		$ 9.50
800	$ 7,200.00		$ 9.00
900	$ 7,650.00		$ 8.50
1000	$ 8,000.00		$ 8.00

NEW BUSINESS - BUNDLES

Bundles : ISP + SWGI / OMBN		
100Mbps ISP : 100Mbps SWGI/OMBN		
isp-00100		100 Mbps ISP
swgi-00100		100 Mbps SWGI / OMBN
	$ **20,000 annual**	
500Mbps ISP : 1000Mbps SWGI/OMBN		
isp-00500		500 Mbps ISP
swgi-01000		1 Gbps SWGI / OMBN
	$ **80,000 annual**	
1000Mbps ISP : 1000Mbps SWGI/OMBN		
isp-01000		1 Gbps ISP
swgi-01000		1 Gbps SWGI / OMBN
	$**112,000 annual**	

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NEW BUSINESS - INTRANET

- Intranet (SwGI / OMBN)
  - Only two tiers
  - Second (redundant) connection: $100/month (active/standby)

Statewide Government Intranet (SWGI) / One Maryland Broadband Network (OMBN)

Bandwidth (Mbps)	Cost/Month	NRC	Cost/Mbps
100	$ 400.00	$ -	$ 4.00
1000	$ 2,000.00	$ -	$ 2.00

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OPERATIONAL SUBSCRIBERS

- 81 Operational Subscribers – one new subscriber
  - DLLR/DUI – Division of Unemployment Insurance

- Circuit Breakdown
  - 91 ISP Circuits (+0)
  - 90 SwGI Circuits (+0)
  - 1459 Layer 2 Circuits (+54)
  - 13 VPN Subscriber Connections (+0)
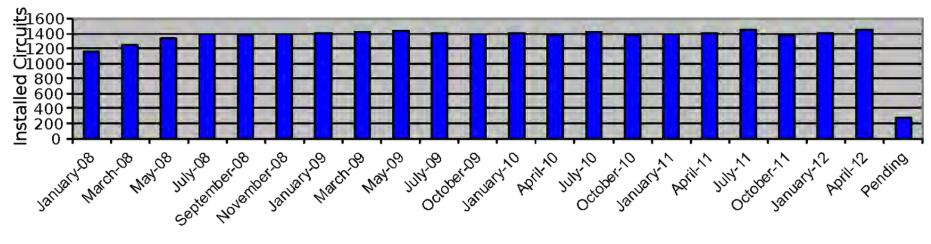 - 44 VPRN Circuits (+8)
  - 403 EE Circuits (+70)

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Subscriber Provisioning

- 131 Provisioning requests were received

- 281 Active provisioning requests are in process

- 140 tickets were completed
  (Customer Acceptance form sent to customer)

- Of the 140 completed tickets, 92 were accepted/closed

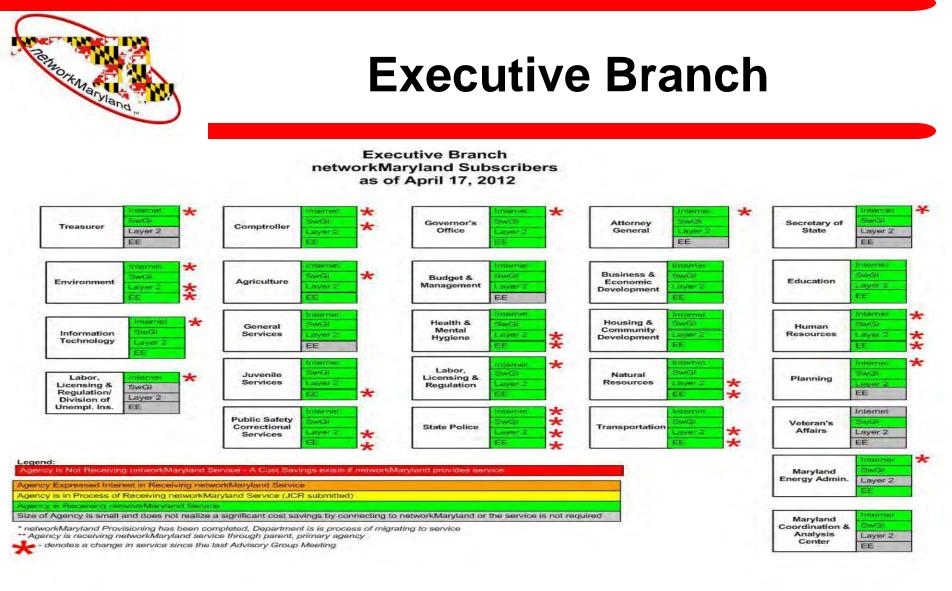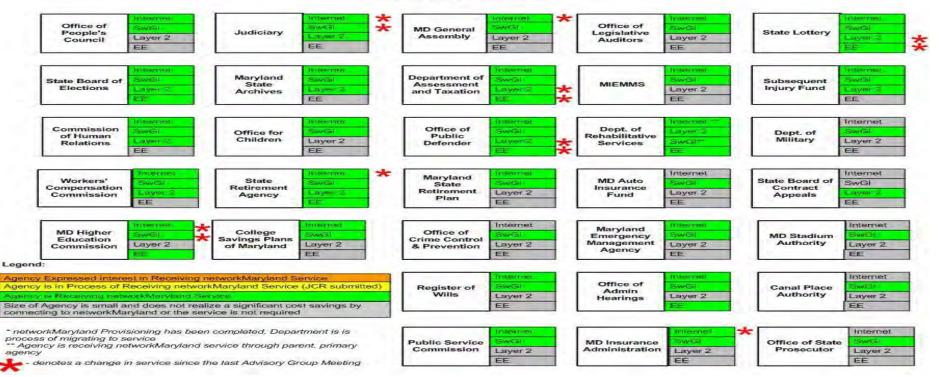- Completed large push by DHMH to migrate to EE

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Installed Circuits

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Executive Branch

**Executive Branch
networkMaryland Subscribers
as of April 17, 2012**

Treasurer	Internet / SwGi / Layer 2 / EE	*
Comptroller	Internet / SwGi / Layer 2 / EE	* *
Governor's Office	Internet / SwGi / Layer 2 / EE	*
Attorney General	Internet / SwGi / Layer 2 / EE	*
Secretary of State	Internet / SwGi / Layer 2 / EE	*

Environment	Internet / SwGi / Layer 2 / EE	* * *
Agriculture	Internet / SwGi / Layer 2 / EE	*
Budget & Management	Internet / SwGi / Layer 2 / EE	
Business & Economic Development	Internet / SwGi / Layer 2 / EE	
Education	Internet / SwGi / Layer 2 / EE	

Information Technology	Internet / SwGi / Layer 2 / EE	*
General Services	Internet / SwGi / Layer 2 / EE	
Health & Mental Hygiene	Internet / SwGi / Layer 2 / EE	* *
Housing & Community Development	Internet / SwGi / Layer 2 / EE	
Human Resources	Internet / SwGi / Layer 2 / EE	* * *

Labor, Licensing & Regulation/ Division of Unempl. Ins.	Internet / SwGi / Layer 2 / EE	*
Juvenile Services	Internet / SwGi / Layer 2 / EE	*
Labor, Licensing & Regulation	Internet / SwGi / Layer 2 / EE	* *
Natural Resources	Internet / SwGi / Layer 2 / EE	* *
Planning	Internet / SwGi / Layer 2 / EE	*

Public Safety Correctional Services	Internet / SwGi / Layer 2 / EE	* *
State Police	Internet / SwGi / Layer 2 / EE	* * * *
Transportation	Internet / SwGi / Layer 2 / EE	* *
Veteran's Affairs	Internet / SwGi / Layer 2 / EE	

| Maryland Energy Admin. | Internet / SwGi / Layer 2 / EE | * |

| Maryland Coordination & Analysis Center | Internet / SwGi / Layer 2 / EE | |

Legend:
Agency is Not Receiving networkMaryland Service - A Cost Savings exists if networkMaryland provides service
Agency Expressed Interest in Receiving networkMaryland Service
Agency is in Process of Receiving networkMaryland Service (JCR submitted)
Agency is Receiving networkMaryland Service
Size of Agency is small and does not realize a significant cost savings by connecting to networkMaryland or the service is not required

* networkMaryland Provisioning has been completed, Department is is process of migrating to service
** Agency is receiving networkMaryland service through parent, primary agency
* - denotes a change in service since the last Advisory Group Meeting

*

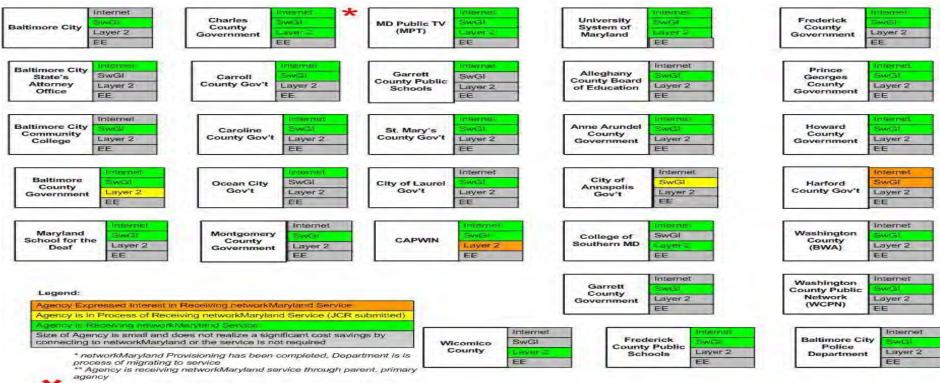# Non-Executive Branch

Non-Executive Branch
networkMaryland Subscribers
as of April 17, 2012

NON-STATE CUSTOMERS

Non-State entities\Counties\Municipalities networkMaryland Subscribers as of April 17, 2012

Baltimore City	Internet / SwGi / Layer 2 / EE
Charles County Government	Internet / SwGi / Layer 2 / EE	✱
MD Public TV (MPT)	Internet / SwGi / Layer 2 / EE
University System of Maryland	Internet / SwGi / Layer 2 / EE
Frederick County Government	Internet / SwGi / Layer 2 / EE

Baltimore City State's Attorney Office	Internet / SwGi / Layer 2 / EE
Carroll County Gov't	Internet / SwGi / Layer 2 / EE
Garrett County Public Schools	Internet / SwGi / Layer 2 / EE
Alleghany County Board of Education	Internet / SwGi / Layer 2 / EE
Prince Georges County Government	Internet / SwGi / Layer 2 / EE

Baltimore City Community College	Internet / SwGi / Layer 2 / EE
Caroline County Gov't	Internet / SwGi / Layer 2 / EE
St. Mary's County Gov't	Internet / SwGi / Layer 2 / EE
Anne Arundel County Government	Internet / SwGi / Layer 2 / EE
Howard County Government	Internet / SwGi / Layer 2 / EE

Baltimore County Government	Internet / SwGi / Layer 2 / EE
Ocean City Gov't	Internet / SwGi / Layer 2 / EE
City of Laurel Gov't	Internet / SwGi / Layer 2 / EE
City of Annapolis Gov't	Internet / SwGi / Layer 2 / EE
Harford County Gov't	Internet / SwGi / Layer 2 / EE

Maryland School for the Deaf	Internet / SwGi / Layer 2 / EE
Montgomery County Government	Internet / SwGi / Layer 2 / EE
CAPWIN	Internet / SwGi / Layer 2 / EE
College of Southern MD	Internet / SwGi / Layer 2 / EE
Washington County (BWA)	Internet / SwGi / Layer 2 / EE

| Garrett County Government | Internet / SwGi / Layer 2 / EE |
| Washington County Public Network (WCPN) | Internet / SwGi / Layer 2 / EE |

Wicomico County	Internet / SwGi / Layer 2 / EE
Frederick County Public Schools	Internet / SwGi / Layer 2 / EE
Baltimore City Police Department	Internet / SwGi / Layer 2 / EE

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SERVICE LEVEL PERFORMANCE

January 2012	1 - Critical	2 - High	3 - Normal
# of Cases Relating to Outages	14	61	16
Initial Response from Detection (10m, 10m, 10m)	14 100 %	61 100 %	15 94 %
Begin Diagnosis (10m, 10m, 10m)	14 100 %	60 98 %	15 94 %
Initial Notificaiton to State (10m, 10m, 10m)	100 %	100 %	100 %
# of Cases for Onsite Support with Parts	0	1	0
Onsite Support With Parts (4h, 4h, 24h)	0 100 %	0 0 %	0 100 %
Total # of Cases Included in Escalation SLA's (Not Approved for Exemption)	8	33	14
1st Escalation (20m, 4h, 24h)	8 100 %	32 97 %	14 100 %
2nd Escalation (1h, 4h, 24h)	8 100 %	32 97 %	14 100 %
3rd Escalation (1h, 4h, 24h)	8 100 %	32 97 %	14 100 %
Resolution Notification (10m, 10m, 10m)	100 %	100 %	100 %

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SERVICE LEVEL PERFORMANCE

February 2012	1 - Critical	2 - High	3 - Normal
# of Cases Relating to Outages	6	56	21
Initial Response from Detection (10m, 10m, 10m)	6	56	21
	100 %	100 %	100 %
Begin Diagnosis (10m, 10m, 10m)	6	56	21
	100 %	100 %	100 %
Initial Notificaiton to State (10m, 10m, 10m)	100 %	100 %	100 %
# of Cases for Onsite Support with Parts	0	0	0
Onsite Support With Parts (4h, 4h, 24h)	0	0	0
	100 %	100 %	100 %
Total # of Cases Included in Escalation SLA's (Not Approved for Exemption)	6	36	15
1st Escalation (20m, 4h, 24h)	6	36	14
	100 %	100 %	93 %
2nd Escalation (1h, 4h, 24h)	6	36	15
	100 %	100 %	100 %
3rd Escalation (1h, 4h, 24h)	6	36	15
	100 %	100 %	100 %
Resolution Notification (10m, 10m, 10m)	100 %	100 %	100 %

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SERVICE LEVEL PERFORMANCE

March 2012	1 - Critical	2 - High	3 - Normal
# of Cases Relating to Outages	3	82	18
Initial Response from Detection (10m, 10m, 10m)	3	82	18
	100 %	100 %	100 %
Begin Diagnosis (10m, 10m, 10m)	3	81	18
	100 %	99 %	100 %
Initial Notificaiton to State (10m, 10m, 10m)	100 %	100 %	100 %
# of Cases for Onsite Support with Parts	0	0	0
Onsite Support With Parts (4h, 4h, 24h)	0	0	0
	100 %	100 %	100 %
Total # of Cases Included in Escalation SLA's (Not Approved for Exemption)	2	30	10
1st Escalation (20m, 4h, 24h)	2	29	10
	100 %	97 %	100 %
2nd Escalation (1h, 4h, 24h)	2	29	10
	100 %	97 %	100 %
3rd Escalation (1h, 4h, 24h)	2	29	10
	100 %	97 %	100 %
Resolution Notification (10m, 10m, 10m)	100 %	100 %	100 %

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MAINTENANCE PLANNING

- Planning maintenance activities for 3 quarters
- Fewer service impacting maintenance work
- Schedule regular quarterly (i.e. code upgrades)
- Group work by hardware manufacturer
- Use extended release code versions whenever possible

SONET NETWORK

- Problems with SONET equipment at Keysers Ridge
    - Multiple power outages at site / loss of backplane communication
    - Replaced chassis with last spare

- Decommissioned Elkton chassis to replenish spares

- Will decommission McLean and La Plata as part of 10Gig upgrade

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PROJECT STATUS

- One Maryland Broadband Network
    - Received backbone hardware
    - Engineering work substantially complete
    - Construction is underway in Southern MD and eastern shore
    - Equipment installation completed at UMCP
    - Staging equipment for southern ring
        - UMCP
        - Annapolis (ADC, GenServ)
        - LaPlata
        - Leonartdown
        - Prince Frederick

PROJECT STATUS

- Creating new MSC / Fiber connected deployments
    - 44 North Potomac Street, Hagerstown
    - PG County Courthouse, Upper Marlboro
    - 315 High Street, Chestertown
    - 100 W. Patrick Street, Frederick
    - 100 E. All Saints Street, Frederick
    - Wabash Courthouse, Baltimore
    - 7500 Ritchie Highway, Glen Burnie

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PROJECT STATUS

- Network Resiliency: Separate service delivery & core
  - Dedicated routers for upstream ISP connectivity: *completed*
  - Move Layer 3 terminations off core routers
  - Migrate MANs from Layer 2 to Layer 3 connections
  - See *OMBN Design Criteria document*

- Backbone Upgrade to 10Gbps: Full schedule developed
  - Southern Ring: July 2012
  - Northern Eastern Shore Ring: September 2012
    - Annapolis
    - Centerville
    - Chestertown
    - Elkton
    - Baltimore

PROJECT STATUS

- Deployment of multi-cast capabilities on SWGI
  - All devices installed and code at proper levels.

- Frederick MAN
  - Build a diverse fiber path through Frederick: County will supply a pair of fiber to get a redundant path LEC to Health Dept.

- Cambridge MAN
  - District Courthouse and Dorchester County Office Building

- Initiate Eastern Shore Fiber Backbone project
  - 12 strands of fiber received from MdBC on entire shore
  - Princess Anne and Elkton next on the list

*

FIBER PROJECTS

- Pikesville
  - Compete: Migrated backbone circuits to our private fiber connection
  - Redundant fiber connection via Verizon TLS to ADC

- Hagerstown: Fiber to DPSCS complex:
  - Part of OMBN project

- Fiber documentation and mapping project
  - Level3 Backbone: To be completed by MdBC as part of Resource Share Agreement (2 years to complete - clock reset to April 2012)

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OTHER BUSINESS

- networkMaryland™ Engineering Committee meeting
    - Monday May14th, 2011, 1:30 PM @ UMBC Technology Center
    - Merged with MDREN engineering meeting

- Closing Questions or Comments

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MEETING ADJOURNED

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