Measuring Managed Services

IT Infrastructure Partnership Team

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IT INFRASTRUCTURE PARTNERSHIP

VITA

NORTHROP GRUMMAN

This document explains performance measures established to ensure customers receive high quality and reliable service from the ITP

After reading this document, you will understand:

- Service goals and measures established for the enterprise
- Performance results to date
- Plans to continue improving service where necessary

Key to managed services is measuring performance and sharing service results with customers

Purpose of Implementing Managed Services

- Adopt a more business-like approach to managing the state's information technology resources and to operating associated systems
- Modernize IT service delivery with measurable results at predictable costs
- Ensure customers receive predictable, reliable IT services needed to carry out the mission of their agency

Managed Services results from 5 transformations

Asset Management

Managing asset changes appropriately in order to present accurate bills

Technology transformation

Ensures the technology and tools are in place to monitor/manage services from an enterprise perspective

Mature processes

Standardizing and optimizing processes and procedures ensures service quality and integration of operations; less "fire fighting" and more process rigor

Defined services & measures

Well defined and understood services and performance targets, with continuous improvement initiatives triggered by root cause analysis

Workforce transformation

Preparing the workforce with the skills to efficiently deliver managed services

In the contract with the state, Northrop Grumman committed to 196 enterprise service measures spanning various IT areas…

SLA Examples

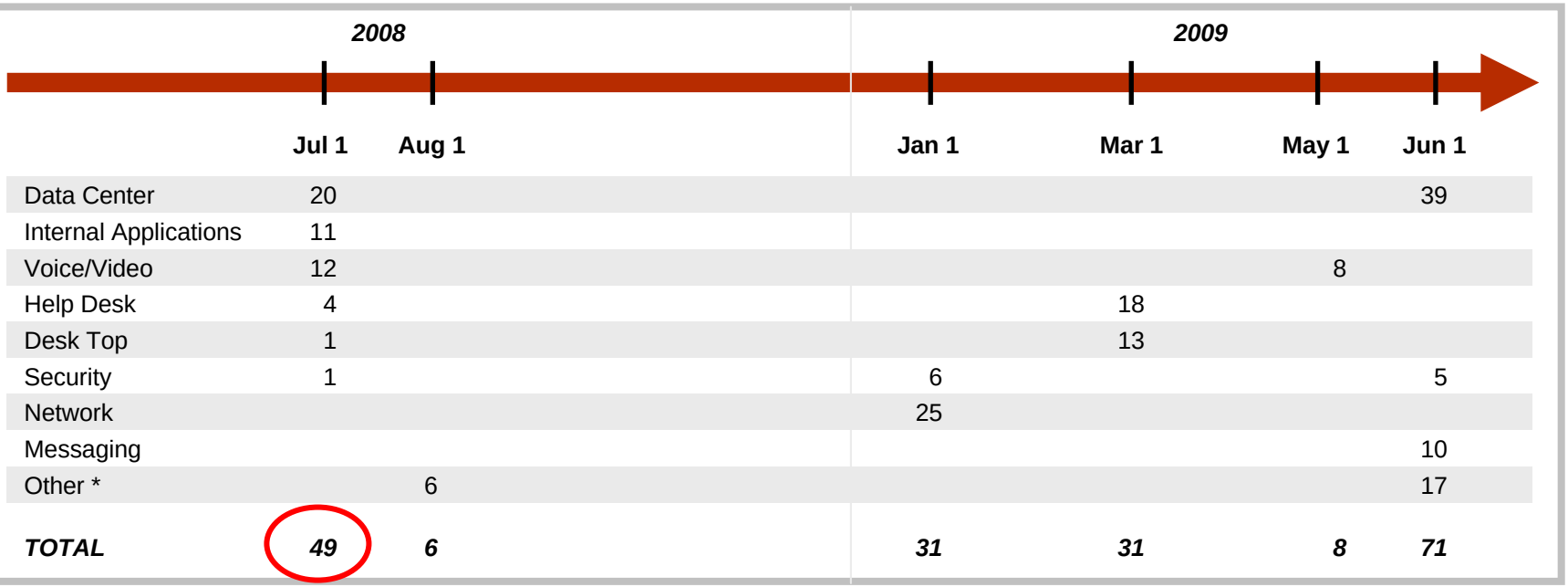
- Network Availability
- Desktop Repairs
- Help Desk Response
- Incident resolution
- Mainframe Availability
- Server Availability
- Accuracy of Asset Inventory
- Incremental Back-up
- Security Scanning
- Disaster Recovery Testing

- SLAs measure service to ensure quality and reliability
- They identify trends and problem areas to guide improvements
- Payment penalties associated with SLAs bring accountability to the contract and help focus service efforts on areas that matter most to customers
- In general, payment penalties are between VITA and Northrop Grumman

…the goal of these measures is to ensure quality and reliable service, provide accountability and identify areas for improvement

The ITP implemented 49 of the performance measures in July 2008 and will implement all 196 by July 2009

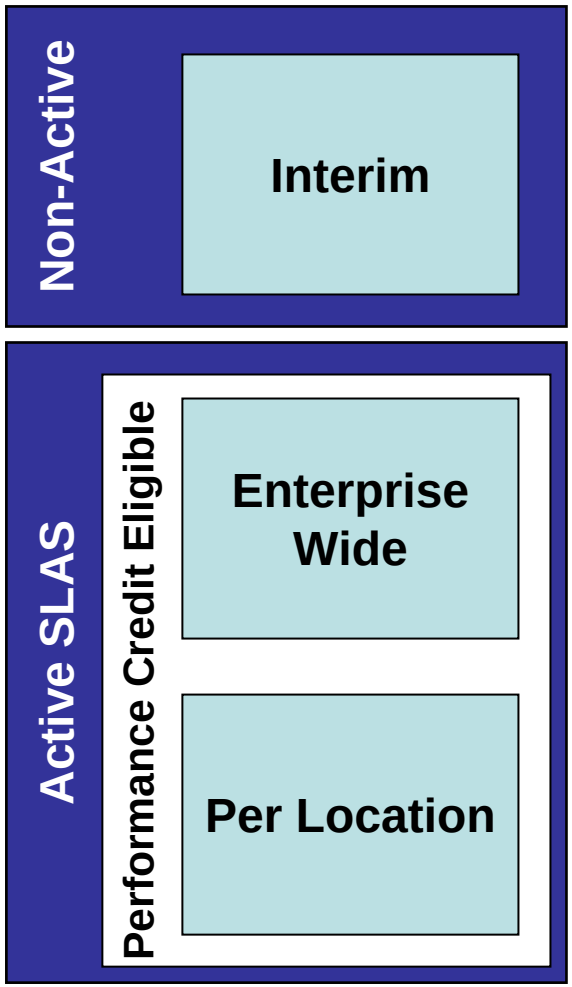
SLA Implementation Timeline



	Jul 1	Aug 1	Jan 1	Mar 1	May 1	Jun 1
Data Center	20					39
Internal Applications	11					
Voice/Video	12				8	
Help Desk	4			18		
Desk Top	1			13		
Security	1		6			5
Network			25			
Messaging						10
Other *		6				17
TOTAL	***49***	***6***	***31***	***31***	***8***	***71***

Note: "Other" includes SLAs related to disaster recovery, chargebacks, end user surveys, asset tracking, and incident resolution; the implementation timeline may be adjusted per discussions between VITA and Northrop Grumman

SLAs are implemented in phases to ensure that measures are accurate and realistic before each SLA is eligible for penalties



This is essentially a testing phase in which Northrop Grumman is required to produce initial reports as soon as the reporting mechanisms for SLAs are developed, but is not yet required to meet thresholds. The goal during this phase is to ensure data collection methods are accurate and there is opportunity to correct initial problem areas.

These SLAs are considered active and Northrop Grumman is required to report on and meet or exceed thresholds for them or be subject to penalties.

These SLAs are also considered active, however, in most cases they are measured by location. When an SLA is missed that falls under this category, in most cases, Northrop Grumman is penalized for each location disrupted. Examples include Network and Voice connectivity.

In the initial months, reports show that most targets were met for performance credit eligible SLAs…

Tower	SLA #	Measure	SLA Target	F	M	A	M	J	J	A	S	O	N	D	J	F
Cross Functional	1.33	Full Backup Summary	99%						99%	99%	99%					
	1.35	Archive Backup Summary	99%						100%	100%	100%					
	1.41	Restore Request – Production Systems at CESC	95%						77%	100%	100%					
Security	3.41	Security – Vulnerability Scanning - Tracking	98%						98%	95%	100%					
Desktop	5.41	Procurement of new devices	95%						Note A	Note A	Note A					
Mainframe Server	7.11	Mainframe OS (Class 1) Availability	99.8%						100%	100%	100%					
	7.13	CESC/Mainframe Production Sub-Systems - Unisys	99.5%						100%	100%	100%					
	7.16	QA & Test Servers	98%						Note B	Note B	Note B					
	7.17	Development Servers	99%						Note B	Note B	Note B					

Actual Example

Note A: No Instances during the reporting interval **Note B**: No Performance Credit Eligible Infrastructure to measure

…and improvements were made to address narrow misses

Interim SLAs for incident management are currently being tracked and we are working to improve problem areas…

Tower	SLA #	Measure	SLA Target	F	M	A	M	J	J	A	S	O	N	D	J
Cross Functional (Incidents Resolved Critical Data Ctr Locations)	1.12 *(06/09)*	Severity 1	90% < 4 hrs					66%	40%	54.5%					
	1.13 *(06/09)*	Severity 2	95% < 8 hrs					84%	64%	90%					
	1.14 *(06/09)*	Severity 3	95% < 16 hrs					51%	50%	64%					
	1.15 *(06/09)*	Severity 4	95%					100%	100%	100%					
Cross Functional (Incidents Resolved Other Locations)	1.21 *(06/09)*	Severity 1	85% < 8 hrs					49%	53%	68%					
	1.22 *(06/09)*	Severity 2	90% < 16 hrs					63%	63%	86%					
	1.23 *(06/09)*	Severity 3	90% < 18 hrs					57%	56%	74%					
	1.24 *(06/09)*	Severity 4	95%					100%	100%	100%					
Help Desk	4.21 (03/09)	Average Speed to Answer	60 sec			18s	22s	35s	19s	54s					
	4.24 *(03/09)*	Average Call Abandon Rate	<= 5%			1%	2%	3%	1%	6%					
	4.25 *(03/09)*	Average Email Response Speed 90.0% =< 1 hr response time	90%			98%	97%	90%	97%	93%					
	4.31 *(03/09)*	Average First Call Resolve Rate	70%			86%	87%	85%	84%	84%					
	4.32 *(03/09)*	Average Shrink Wrap Resolutions 90% =< 2 hours	90%			70%	63%	61%	50%	43%					

…in many cases, SLA performance will improve over the next year as the new technology and processes are put in place to improve service

Per location SLAs will primarily consist of network and voice availability SLAs

Tower	SLA #	Measure	SLA	F	M	A	M	J	J	A	S	O	N	D	J
Network	8.40 (01/09)	Router Connectivity – Large	99.95%	0/11	0/11	3/11	0/13	0/15	0/22	0/22	**1/26**				
	8.41 (01/09)	Router Connectivity – Medium	99.95%	0/13	0/13	1/22	0/27	0/38	0/45	2/54	**2/63**				
	8.42 (01/09)	Router Connectivity – Small - Critical	99.95%	0/0	0/0	0/0	0/0	0/0	0/0	0/0	**0/0**				
	8.43 (01/09)	Router Connectivity – Small	99.70%	2/567	0/567	13/657	0/717	4/778	12/828	17/874	**12/878**				
	8.50 (01/09)	LAN Connectivity – Large	99.70%	0/11	2/11	2/11	1/13	0/15	0/22	1/22	**1/26**				
	8.51 (01/09)	LAN Connectivity – Medium	99.70%	0/13	0/13	0/22	1/27	0/38	0/45	0/54	**3/63**				
	8.52 (01/09)	LAN Connectivity – Small - Critical	99.70%	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0				
	8.53 (01/09)	LAN Connectivity – Small	99.70%	0/567	0/567	0/657	5/717	2/778	1/828	2/874	65/878				
	8.81 (01/09)	Network Transit Delay	< 80ms RTD	0/591	54/591	105/690	Note A.	104/940	145/895	202/895	220/1030				
	8.82 (01/09)	Network Packet Loss	<= .05% Data Loss	0/591	1/591	3/690	Note A.	3/940	3/895	2/895	7/1030				

Initial metrics reflect performance for the entire enterprise, but Northrop Grumman is working to provide select metrics for each agency

- Initial metrics reflect performance for the entire enterprise
- To produce metrics by agency, Northrop Grumman needs to develop proper coding and reporting mechanisms to extract agency specific data
- A team is currently identifying which measures could be provided on an agency-by-agency basis and working to develop reporting tools – agencies will be involved in the process
- A limited number of agency specific metrics will be available later this winter
- CAMs will share these metrics with agencies as they are available

The Commonwealth also will incorporate SLAs in updated MOUs with customers

- The Commonwealth recently kicked off efforts to update the Memorandums of Understanding to which agencies agreed in 2005
- The new MOUs will reflect the Commonwealth Infrastructure Agreement (CIA) and creation of the IT Partnership
- They will now include significant detail on SLAs and performance expectations
- Drafts are currently being reviewed by the PAC and Auditor of Public Accounts (APA)
- The Commonwealth expects to solicit agency input for base MOUs in Q1 2009

Next Steps

- Continue to post and share enterprise performance measures over the months ahead
- Work with agencies to establish and begin sharing agency-specific metrics
- Establish new MOUs for customer agencies
- Make adjustments to service delivery as needed
- Work toward providing comprehensive performance measures including P2P, RFS, and SLAs at a later date