

MEMORANDUM OF UNDERSTANDING
BETWEEN THE
WEST VIRGINIA OFFICE OF TECHNOLOGY
AND THE
WEST VIRGINIA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

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The Office of Technology (OT) is responsible for delivery and support of statewide enterprise Information Technology (IT) infrastructure, including hardware, operating systems and communications. The Department of ENVIRONMENTAL PROTECTION (DEP) IT staff is responsible for delivering and supporting agency-specific applications and databases. The purpose of this MOU is to align OT and DEP based on the above stated responsibilities. This MOU is broken into four specific sections: Introduction and General Terms, Service Areas, Escalation Procedures and Charge Back

Section 1 – Introduction and General Terms

Section 2 – Service Areas – Categorizes and defines *what* the features and capabilities are for service. Services are organized by Service Family. The service families in-scope for this MOU are the following: Platform, Telecommunication, Desktop, Messaging, Information Security, Technology Service Desk and Hosting.

Section 3 – Escalation Procedures – Specifies how OT will manage incidents and service requests to ensure we are meeting DEP's needs and expectations.

Section 4 – Charge Back – Specifies how OT will bill back for services during the short-term transition in addition to what DEP may expect in the future

1 INTRODUCTION

1.1 Agreeing Parties

For and between West Virginia Office of Technology (OT) and West Virginia Department of ENVIRONMENTAL PROTECTION (DEP), this Memorandum of Understanding (MOU) entered into this 16th day of May, 2007.

1.2 Executive Overview

Pursuant to West Virginia Code Article 6 Chapter 5A, the OT is responsible for the State's technical infrastructure and providing quality technology services. Our intent is to standardize the State's technical infrastructure and consolidate employees currently distributed within various state agencies into a centrally-managed technology infrastructure support organization. Once standardization and consolidation are complete, our customers should have the full expectation that their technology cost will decline, their satisfaction with support will increase, network and system availability and reliability will improve and security risks will diminish.

The purpose of this MOU is to promote service quality by 1) defining services supported by OT, 2) organizing and documenting the roles and responsibilities performed to deliver services, 3) defining service level objectives, 4) identifying escalation and corrective action processes if service objectives are not met and 5) defining and agreeing on a short-term and long-term cost structure to provide such services.

1.3 Implementation Phases of the MOU

The purpose of this MOU is to reach an agreement on the framework for services, roles and responsibilities and implementing this framework into our daily operation. Additionally, it is expected that DEP and OT will reach an agreement on service level objectives, measurement techniques, measurement period, escalation and resolution procedures and service charges. Upon execution of this MOU, the OT will begin to develop baseline metrics for each of the agreed upon service level objectives. Service level objectives will be established in each of the following areas:

- DEP Customer Satisfaction
- Availability and Reliability of Service
- Responsiveness
- Financial Results
- Security/Vulnerability

Once baselines are established, OT will monitor actual performance and establish improvement goals against the baseline service level measures which will be reported back to DEP management. At a minimum, OT's report back to DEP management will include the following: (1) an itemized report of provisioned services, (2) services delivered per service levels and (3) ongoing performance reporting and evaluation against provisioned services

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The Service Level Objectives will be reevaluated after one year to adjust performance targets based on actual results achieved

1.4 General Terms

1. The MOU is in effect for two years, effective on the date of final signature and will be mutually re-evaluated yearly to validate the quality and quantity of services and alignment of roles and responsibilities. The evaluations are initiated by the OT Director of Client Services or as requested by the DEP management.
2. In the event that OT does not meet the service level or cost obligations defined in this document, DEP may terminate this agreement with ninety (90) days' written notice. In that event, all reasonable costs and expenses incurred to the effective date of termination and all commitments which have become irrevocably obligated prior to receipt of the written notice of the termination shall be reimbursable as is otherwise provided herein. The parties agree that in the event of termination full cooperation will affect the transfer to DEP of position and/or vacancies listed in 7.1.1. Additionally, necessary equipment, software, licenses and service contracts used or obtained for the benefit of DEP will be equitably reassigned.
3. DEP will provide on-site OT personnel, adequate office space and furniture to perform its specific duties at no charge to the OT. DEP will allow the equipment currently utilized by employees transferring to OT to remain with that employee until the end of the equipment's life. OT will be responsible for inventory control, WVFIMS update, annual inventory certification and final disposition for any equipment removed from DEP premises. Equipment purchased by DEP and in use by OT employees on DEP premises will remain on the books as property of DEP. However, a list of any equipment transferring with the employees to OT, that is lost or intended to be sent to state surplus, must be provided to DEP to satisfy federal grant requirements and internal tracking of lost and stolen equipment. DEP will then offer the equipment to the federal granting agency, as required, or secure federal granting agencies approval for disposal. All furniture will remain in DEP buildings.
4. OT will make reasonable efforts to assure that no DEP facility and/or data will be compromised by an OT employee who poses a threat to the safety of DEP employees and/or clients. As such, the OT warrants that all OT employees used on DEP projects will undergo criminal background checks.
5. OT is responsible for managing subcontractor's performance in delivering services and in performing roles within the scope and service level objectives of this MOU, including any portion of services or responsibilities by a third party provider. The transition to a third party provider does not alter the service objectives defined in this MOU.
6. OT is responsible for providing training for its personnel to adequately perform its duties. DEP will provide training for business-specific knowledge, skills and abilities that DEP requires of OT employees.
7. Should DEP experience a decrease in business that directly results in a decrease in the demand for OT labor and services, OT agrees to decrease charges to DEP relative to services and labor provided. Conversely, should DEP experience an increase in business that directly results in an increase in the demand for OT services, OT shall appropriately increase charges to DEP. A shift in business demand is defined as new or expanded IT functionality or a two

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percent increase or decrease in one or more of the following areas:

- total number of PCs supported
- total number of phones supported
- total number of network IDs supported

Current inventories are defined in appendix 7.6

8. Systems identified as critical or that require 24x7 support will have on-call support.
9. Critical services and processes are those activities that cannot be lost without jeopardizing the mission of DEP. Critical systems are identified via a Business Impact Analysis and identified in DEP's Continuity of Operations Plan (COOP). In the absence of COOP, OT will work with DEP to determine critical systems within the agency.
10. Service performance measurement and reporting conducted for DEP by OT is dependent upon the availability of measurement tools that currently exist at DEP or OT. Where proactive monitoring tools do not exist, Technology Service Desk Incident reports will be used to calculate performance metrics
11. Should the DEP and OT mutually agree that additional metrics are necessary to more comprehensively measure service level performance, such metrics will be implemented as agreed.
12. This Agreement may be amended in whole or in part by mutual consent of the parties. Any modification shall be in writing and signed by an authorized representative of each of the parties.
13. OT employees assigned at a DEP facility will abide by DEP policies and procedures.

2 SERVICE AREAS

2.1 OT Core Infrastructure Services

2.1.1 Platform Services

2.1.1.1 Service Definition

Platform Services provide high performance, high volume, high availability and security resources for a wide range of information technologies. These services are provided over a wide range of hardware and software operating systems.

The following are available within the Platform Services:

- Server and Mainframe Backup and Recovery Services
- Mainframe
- Production Control
- Print Services
- Storage Services (Tape, Disk, etc.)
- Server Support Linux, Windows, UNIX

Platform Services will provide the following key benefits:

- 24 x 7 x 365 operation including real-time monitoring and fault management
- Standard server platform technologies
- Data retention and data recovery of DEP critical data as defined by DEP (both on and off-site storage)
- Secure and environmentally controlled data center environment
- Automated production scheduling services
- Systems monitoring, performance and capacity management software tools
- Network print services

2.1.1.2 Service Level Objectives

DEFINITION	General System Availability is defined as the server CPU, system memory, disks and peripherals up to the connection to the Network. Availability is for the server or server-cluster that provides a DEP-facing service and excludes scheduled maintenance. Service level objective minimum performance target and actual service level obtained will be reported to DEP monthly. OI will provide DEP a corrective action plan when service level minimum performance targets are not met three months consecutively, or if targets are not met 75% of a calendar year.
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PRE-SCHEDULED DOWNTIME REQUIREMENTS	All pre-scheduled system downtime and maintenance, unless otherwise agreed upon in advance by the DEP, will occur:
	For the systems with 24x7x365 requirements—All pre-scheduled maintenance shall be performed based on OT's Change Management process and during agreed schedule maintenance windows.
	For systems having non-24x7x365 requirements—Pre-scheduled maintenance shall be performed outside of the normal system availability timeframe.

General System Availability Service Level Requirements

System Platform	Service Measure	Performance Target	Minimum Performance %
Mainframe OS and Subsystems Mission Critical	Aggregate Availability	Sun-Sat, 00:00-24:00	99.90%
Windows Mission Critical	Aggregate Availability	Sun-Sat, 00:00-24:00	99.90%
Windows Others	Aggregate Availability	Sun-Sat, 00:00-24:00	98.00%
RISC/Unix Mission Critical	Aggregate Availability	Sun-Sat, 00:00-24:00	99.90%
RISC/Unix Others	Aggregate Availability	Sun-Sat, 00:00-24:00	98.00%
QA/Test Systems and Servers	Aggregate Availability	OT agrees to offer high availability services during normal business hours and other periods as agreed upon	NA
Development Servers	Aggregate Availability	OT agrees to offer high availability services during normal business hours and other periods as agreed upon	NA

Minimum performance percentage will be calculated based on trouble tickets or incidents logged into the OT problem management system. The duration of every outage or service interruption will be captured. Service interruptions and outages will be reported back to DEP on a monthly basis. Minimum performance percentages will be calculated by summing up the total number of minutes that the service was not available by each platform, subtracting that from the total number of minutes the system platform should have been available and then dividing by the total number of minutes the system should have been available. For example, suppose the mainframe is expected to be available 24 hours a day, 7 days a week. Then, suppose the mainframe experienced a twenty minute outage and another forty minute outage later in the month. Performance percentage would be calculated by taking the number of minutes available in a day (1,440); multiplied by the number of days in a month. Assuming thirty days in the month, OT's total number of available minutes would be 43200. OT would then sum the outages for the month (20 + 40). OT would then calculate performance percentages as $(43200 - 60)/43200$ which would equal 99.86%. In this case, OT would not meet our service level objective for that month. This process would be repeated for each severity level. In order for OT to guarantee such high minimum performance levels, production hardware must be supported by the manufacturer and operating system software must not be more than two versions old

2.1.2 Desktop Services

2.1.2.1 Service Definition

Desktop Services are a family of services that manage workstation hardware and software components that provide management of desktop computer technology and support for an organization's individual staff members. This includes onsite support for computers, associated peripherals, office and productivity applications, requests for network services and Personal Data Assistants (PDA).

The following support is available within the Desktop Services family:

- Desktop computing hardware devices, peripherals and associated Operating System (OS) Software
- Laptop or notebook computing hardware devices, peripherals and associated OS Software
- Management of in-scope software licenses
- Business and office productivity software and client computing applications that are a part of standard approved computing device image(s)
- Network-attached printers, scanners, multi-functional devices (printer/scanner/fax/copier) that are attached to the local-area network (LAN) and other peripherals
- Wireless and Handheld computing hardware devices and associated OS Software (i.e., smart phones, PDAs, handheld)
- Best efforts attempt to resolve issues with locally attached peripheral devices (e.g., personal printers, exclusive of consumables).
- Refresh of desktop and laptop computing hardware dependent of DEP funding

Desktop Services can provide the following key benefits:

- Statewide on-site technical support
- Supported software license coordination
- Standardize desktop and user computing environment (hardware and software)
- Improve security and reduce risk/vulnerabilities in the desktop/user computing environment
- Improve asset management and control
- Provide technicians that have industry experience certifications in support of best practices

2.1.2.2 Service Level Objectives

Category	Business Day Hours
Desktop Support	Mon-Fri. 0730-1730 or as scheduled in advance of event

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Enhanced Support	7x24x365 (as needed)
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DEFINITION	Desktop services are initiated by incident trouble tickets or service requests to repair, install, relocate or remove any hardware or software included within the scope of desktop computing. Repair may include the replacement of the affected device subject to DEP funding. An Incident is defined as any event that is not part of the standard operation of a service and which causes, or may cause, an interruption to, or a reduction in, the quality of that service.		
Repair, Install, relocate or remove			
Request	Service Measure	Performance Target	Minimum Performance%
Service via Incident Trouble Ticket	Elapsed time	Sev 1 – two business hours from time of receipt of Incident trouble ticket to contact by technician	90%
		Sev 2 – eight business hours from time of receipt of Incident trouble ticket to contact by technician	90%
		Sev 3 – two business days from time of receipt of Incident trouble ticket to contact by technician	90%
		Sev 4 – five business days from time of receipt of Incident trouble ticket to contact by technician	90%
		Sev 5 – non-critical, will resolve as time allows. Will not be considered when calculating Service level obligations	N/A
Service via Service Request	Elapsed time	5 Business days from date of receipt of the request to identify next steps and plan resolution of service request.	90%

Minimum performance will be calculated based on trouble tickets or incidents logged into the OT problem management system. Every ticket will be assigned a severity level based on the

needs and expectations of our customers. The amount of time that it takes an OT employee to respond to our customer once a problem is reported will be captured in the OT problem management system. Service response will be reported back to DEP on a monthly basis. Minimum performance percentages will be calculated by summing up the total number of tickets OT responded to the customer within the defined severity level timeframe divided by the total number of tickets within that severity level. For example, suppose OT's customers report one hundred severity level 2 calls to the help desk in a month. For Severity Level 2 calls, OT would then be expected to respond in eight hours or less. Then suppose that of the one hundred calls, ninety two were responded to in less than eight hours. OT would then calculate performance percentages as $92/100 =$ which would equal 92%. In this case, OT would meet its service level objective for that severity level for that month. This process would be repeated for each severity level. OT will provide a list, monthly, to DEP of all outstanding Sev 5 trouble tickets or service requests, the original date of the ticket or request and an estimated time for resolution.

2.1.3 Messaging Services

2.1.3.1 Service Definition

Messaging Services are the services and activities required to provide and support email infrastructure interpersonal communications computing the infrastructure needed to support wireless connectivity and wireless communications and handheld devices.

Messaging Services are defined as all activities associated with the provision of Software and support of the DEP's messaging environment that are capable of connecting to OT's Messaging Services infrastructure directly via Local-Area Network (LAN), through the Internet or via wireless connectivity.

OT provides and supports an agreed to and approved standard messaging infrastructure environment on the in-scope computing platforms, including desktops, laptops and handheld devices.

The following are available, or will soon be available, within the Message Services family:

- Email messaging support
- Management of global distribution lists (DLs), mailboxes, generic mailboxes and DEP recipient addresses
- Wireless messaging support (i.e. Blackberry, TREO, IPAQ) as defined in the supported hardware lists
- Real-time collaboration, where implemented, support includes:
 - Secure instant messaging solutions
 - Virtual team workspaces
 - Online meetings and application sharing
- Instant Messaging
- Data Conferencing
- Mailbox Management
- Secure encrypted messaging as required by DEP
- Messaging Security support that includes the following:

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- Content filtering for virus prevention and spam management
- Perimeter security support to cover management of e-mail traffic at the enterprise border, that provides a barrier between DEP's internal messaging environment and non-DEP external messaging environment(s)

Message Services can provide the following key benefits:

- Automated deployment or configuration of the most common end-user messaging applications
- Automated anti-virus update protection and prevention against new viruses and worms
- Tracking and management of messaging software licenses

2.1.3.2 Service Availability Objectives

Messaging service availability is defined as the time during which the messaging environment is fully functioning, connectivity between the users and the messaging system and server(s) is established and normal business operations can be carried out with no message or data loss, no downtime, or no disruptive performance degradation.

The following are two classes of Message Service Levels:

- **High Availability:** DEP locations and facilities where critical functions are performed, received, or reside and which require a high level of availability of message services. These critical DEP locations and facilities have a 24x7x365 message services requirement.
- **Standard Availability:** All other DEP locations and facilities.

Service level objective minimum performance target and actual service level obtained will be reported to DEP monthly. OT will provide DEP a corrective action plan when service level minimum performance targets are not met three months consecutively, or if targets are not met 75% of a calendar year.

For both service classes all scheduled maintenance shall be performed during agency-defined change management windows. Other additional component downtime will be managed during non-operational windows, if possible, based on criticality and the function of the location as approved by the DEP at that location.

MESSAGING SERVICES AVAILABILITY TABLE			
SERVICE TYPE	SERVICE MEASURE	PERFORMANCE TARGET	MINIMUM PERFORMANCE %
Messaging Service for Email Managed Environments	Ability of Service to Send and Receive Messages	Sun-Sat, 00:00-24:00	99%

Minimum performance will be calculated based on trouble tickets or incidents logged into the OT problem management system. The duration of every e-mail and messaging service outage will be captured. Outages will be reported back to DEP immediately. Minimum performance percentages will be calculated by summing up the total number of minutes that the e-mail or messaging services were not available, subtracting that from the total number of minutes the

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email and messaging services should have been available and then dividing by the total number of minutes that e-mail and messaging services should have been available. For example, suppose an e-mail service is expected to be available 24 hours a day, 7 days a week. Then suppose the e-mail services experienced a forty minute outage. Performance percentage would be calculated by taking the number of minutes available in a day (1,440); multiplied by the number of days in a month. Assuming thirty days in the month, our total number of available minutes would be 43200. We would then sum the outages for the month, in this case forty minutes. We would then calculate performance percentages as $(43200 - 40)/43200$ which would equal 99.90%. In this case, we would meet our service level objective for that month. This process would be repeated for each email and messaging environment.

2.1.4 Telecommunication Services

Telecommunication Services is a category of services that includes the infrastructure to support secure and reliable data networks, voice networks and video services

2.1.4.1 Network Services

Network services supports the transmission of data across the statewide telecommunications network to accomplish the daily tasks of government. Network services are available via statewide contracts that provide an expanded infrastructure and a schedule of network service offerings that include engineering, provisioning and management that are available to the DEP. Network services include but are not limited to: Wide Area Networks (WAN), Local Area Networks (LAN), Metropolitan Area Networks (MAN), Internet Access, Virtual Private Networks (VPN), OT Data Center Access and Application Access and Consulting and Engineering support.

The following support is available within the Network Services family:

- OT Data Center Access and Application Access
- Provisioning of new or changed service requirements
- Internet Access
- Virtual Private Network
- Standard Wide Area Network Equipment
- Wide Area Network administration and design
- Metropolitan Area Network administration and design
- Local Area Network administration and design
- Local Area Network Equipment
- Remote access
- Cabling and wiring
- Wireless Network Equipment
- Wireless Network administration
- Throughput and Bandwidth Management
- 24X7 Network Monitoring

Network Services can provide the following key benefits:

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- Statewide network coverage
- Incident management to resolution including tracking, escalation and third-party dispatch
- Knowledgeable and experienced staff for the data network services
- Plan, design and implementation of network expansion and optimization

2.1.4.2 Video Services

Video Services makes up a category of services that provides access to video conferencing and video bridging. Currently, the OT is utilizing bridging services via WVNET. OT will be responsible to DEP to ensure video services are available and are of acceptable quality to the DEP.

The following are available within the Video Services family:

- Video Bridging Equipment and End-user Support
- Video Conferencing and Recording

Video Services can provide the following key benefits:

- Fully-equipped facilities
- In-house solution to both services and procurement
- Knowledgeable and experienced staff for the video services

2.1.4.3 Voice Services

Voice Services provide various communication tools to accomplish the daily tasks of government including: wired and wireless voice services, long distance service, other voice services, such as ACD and IVR, Centrex or ISDN service and engineering and consulting.

The following are available within the Voice Services family:

- Voice conferencing
- Cellular Contract Management
- Voice over Internet Protocol (VoIP)
- IP Telephony
- Cabling and wiring support
- ISDN & Key System Equipment and End User Support
- Local and Long Distance Service
- Other Voice Services, including ACD, IVR, Voicemail
- Plan, design and implementation of voice expansion and optimization.
- State Directory Service Application

Voice Services can provide the following key benefits:

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- Incident management to resolution including tracking, escalation and third-party dispatch
- Access to voice engineers

2.1.4.4 Service Level Objectives

Network Availability Service Level Requirements			
Service Type	Service Measure	Performance Target	Minimum Performance %
Network	Availability	Sun-Sat, 00:00-24:00	99.00%
Voice	Availability	Sun-Sat, 00:00-24:00	99.00%
Video	Availability	Mon-Fri, 07:30-17:30	TBD
Internet Access	Availability	Sun-Sat, 00:00-24:00	TBD

Minimum performance will be calculated based on trouble tickets or incidents logged into the OT problem management system. The duration of every outage or service interruption will be captured. Service interruptions and outages will be reported back to DEP on a monthly basis. Minimum performance percentages will be calculated by summing up the total number of minutes that the service was not available by each service type, subtracting that from the total number of minutes each service type should have been available and then dividing by the total number of minutes the service type should have been available. For example, suppose the voice network is expected to be available 24 hours a day, 7 days a week. Then, suppose the voice network experienced an eight hour outage. Performance percentage would be calculated by taking the number of minutes available in a day (1,440); multiplied by the number of days in a month. Assuming thirty days in the month, OT's total number of available minutes would be 43200. OT would then sum the outages for the month (8 hours times 60 minutes or 480 minutes). OT would then calculate performance percentages as $(43200 - 480)/43200$ which would equal 98.86%. In this case, OT would not meet our service level objective for that month. This process would be repeated for each service type. Service level objective minimum performance target and actual service level obtained will be reported to DEP monthly. OT will provide DEP a corrective action plan when service level minimum performance targets are not met three months consecutively, or if targets are not met 75% of a calendar year.

2.2 IT Support Services

2.2.1 Information Security Services (ISS)

2.2.1.1 Service Definition

Information Security Services provides for protection, confidentiality and integrity of data while permitting authorized access. This is accomplished through activities that include risk assessment, security monitoring, anti-virus and anti-spam management, secure data transport, internet filtering and firewall management. Security monitoring includes information security incident detection and prevention, incident identification, incident assessment, tracking, resolution and reporting. Information security services also includes the necessary security infrastructure, systems and records management processes.

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The following are within the scope of ISS:

- Security advisories and alert services
- Security policies, processes, standards and procedures
- Risk and vulnerability assessment
- Information security training and awareness
- Security or breach incident management
- Logical access control to the computing environment
- Plan, design and implementation of security and firewall expansion and optimization.

Information Security Services can provide the following key benefits:

- Assistance in compliance with laws and regulations involving confidentiality
- A secure environment in which to perform business activities
- Monitoring for intrusions and network "attacks"

2.2.1.2 Service Level Objectives

Security Administration Service Level Requirements			
Activity	Service Measure	Performance Target	Performance Target
Deploy service / security patches / anti-virus updates necessary to fix/repair environment vulnerabilities	Elapsed Time	Commence mitigation upon receipt for OT-directed HIGH risk vulnerability	95% of external facing assets
Reporting of detected security incident	Elapsed Time	Reported within 24 hours of detection or time detection should have occurred.	95%

Minimum performance will be calculated based on trouble tickets or incidents logged into the OT problem management system. The duration of a security related issue will be captured. Security related issues will be reported back to DEP immediately. Suppose a virus is undetected for 60 minutes. Performance percentage would be calculated by taking the number of minutes the virus was undetected and subtracting that by the total number of minutes available in a day (1,440). This number would then be divided by the total number of minutes available in a day. Performance percentages would be calculated as $(1440 - 60)/1440$ which would equal 95.83%. In this case, we would meet our service level objective for that incident. This process would be repeated for each security related incident.

2.2.2 Physical Security Services

2.2.2.1 Service Definition

Physical Security Services provides for a secure environment for computing infrastructure. Physical Security is achieved through identifying security needs, establishing physical access controls, maintaining an authorized needs-to-enter access list and monitoring compliance of access activity to established standards and procedures in concert with DEP building manager.

The following are within the scope of Physical Security Services:

- Building security as relating to computer room and other key infrastructure components
- Physical security policies, processes, standards and procedures for technical infrastructure
- Authorization or revocation of computer room access
- 601 57th Street, Charleston, building security system

2.2.3 Technology Service Desk

2.2.3.1 Service Definition

Technology Service Desk manages the activities required to coordinate and respond to incidents (trouble tickets), dispatching service requests and requests for information. OT will provide end-to-end tracking which includes: logging, monitoring, recording resolution and validating closure. Every DEP call is logged, prioritized and either resolved on the initial call or dispatched to the appropriate technical resource for resolution. Ticket status is monitored throughout its life.

The following are available within the Technology Service Desk family:

- Escalation parameters and contact lists
- Point of contact for status
- Routing of requests
- Providing 1st level support for in-scope capabilities
- Password resets for accessible systems
- Recording Incidents
- Root cause analysis

Technology Service Desk can provide the following key benefits:

- Ownership of DEP's problems until resolved to their satisfaction (Note: Requests for new and/or enhanced services are not considered problems and will be submitted to the Project Management Office for prioritization)
- Better understand the DEP's business and to get them back to work as quickly as possible when they have a technology problem
- Establish and maintain positive, long-term DEP relationships through open communication and continuous feedback
- Provide high-level DEP service and technical expertise

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- Respond rapidly and positively to all DEP inquiries

2.2.3.2 Service Level Objectives

Response Time is the number of seconds or cycles it takes DEP to connect with OT's Technology Service Desk representative

Response Time Service Level Requirements			
Technology Service Desk Responsiveness	Service Measure	Performance Target	Minimum Performance %
Average Speed-to-Answer	Phone response time	Mon-Fri 07:30-17:30	≤ 30 sec
Average Time-on-Hold	Phone response time	Mon-Fri 07:30-17:30	≤ 90 sec
Call Abandonment Rate	Phone response time	Mon-Fri 07:30-17:30	< 5%
Deliver as Promised	Physical Time	Mon-Fri 07:30-17:30	90% of customers are responded to within the time frames defined within the assigned Sev code
	Online response time	Mon-Fri 07:30-17:30	≤ 1 hour
Voicemail Response	Voicemail response time	Mon-Fri 07:30-17:30	≤30 minutes
Password	Elapsed time	10 minutes to reset user password to systems that the Technology Service Desk has reset privileges	95%
First Call Resolution	Calls related to trouble tickets resolved during initial phone contact	% of calls resolved that have the potential of being resolved at Level 1	70%

Minimum performance for Average Speed to Answer, Average Time-on-Hold, Call Abandonment Rate and Voicemail Response Rate will be based on averages pulled directly from the OT's phone system

Minimum performance for Delivered as Promised, E-mail Ticket Response, Password Reset and First Call Resolution will be calculated based on trouble tickets or incidents logged into the OT problem management system. The duration of every outage or service interruption will be captured. Service interruptions and outages will be reported back to DEP on a monthly basis. Minimum performance percentages will be calculated by summing the total number of tickets by each service type meeting the performance target and divided by the total number of tickets

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entered for each service type. For example, performance percentage for password resets would be calculated by taking the number of password reset tickets created in a given month resolved in 10 minutes or less, divided by the total number of password reset tickets entered for that month. Assume that the Service Desk received 140 password reset requests during a given month and that 132 of these requests were resolved in 10 minutes or less, OT would calculate performance percentages as $132/140$ which would equal 94.2%. In this case, OT would not meet our service level objective for that month. Similar processes would be repeated for each service type.

The Service Desk is responsible for the prioritization of all requests and ensuring that service level obligations are met. If DEP employees bypass the Service Desk and contact OT personnel directly for support, those requests will be automatically entered into the system as low priority. This is necessary in order to avoid conflicts with the Service Desk prioritization process.

Satisfaction with the Technology Service Desk will be determined by nightly random surveys. These surveys will be conducted by OT and the results reviewed by the DEP.

2.2.4 Hosting Services

2.2.4.1 Service Definition

OT will be playing the role of an internal Application Service Provider (ASP). As an ASP, OT will host and manage applications from centralized facilities and coordinate the support, maintenance, upgrades and administration of the software with the DEP application development groups, similar to the way we manage the mainframe today. DEP Application Development groups will be responsible for defining application requirements and OT will be responsible for the design and implementation of the technologies needed to support those documented requirements. The location of the technology implemented or the specific components used should not be of concern as long as all defined requirements are fully met. Through an ASP model, we will be able to combine hardware, software, networking technologies and technical know-how to provide superior performance, increased security and 24/7/365 availability more effectively and affordably than before. A cost analysis will be provided to DEP prior to the actual purchase of any new initiative. The cost analysis will include a minimum 45 day review and comment period.

3 ESCALATION

3.1 Problem Ticket Escalation Process

Operational incidents properly submitted to the Technology Service Desk are automatically escalated in accordance with the following practice:

Contact	1 st Escalation	2 nd Escalation	3 rd Escalation	4 th Escalation
Technology Service Desk	Technology Service Desk supervisor	Technology Service Desk Manager	Client Services Director	CTO Chief Technology Officer
Severity				
1 Critical	Escalate 30 minutes before obligation due	Escalate once service obligation not met	Escalate after 2 hours	Escalate after 8 hours
2 High	Escalate 60 minutes before obligation due	Escalate once service obligation not met	Escalate after 8 hours	Escalate after 16 hours
3 Important	Escalate 4 hours before obligation due	Escalate once service obligation not met	Escalate after 2 days	Escalate after 4 days
4 Low	Escalate 1 day before obligation due	Escalate once service obligation not met	Escalate after 5 days	Escalate after 10 days
5 As Time Allows	n/a	n/a	n/a	n/a

3.2 Determining Criticality of Outage by Location

Value will be maximized through the centralization, integration, consolidation and standardization of technology assets across the state. OT will focus on providing varying service levels to the DEP based on a tiered approach developed using the following criteria:

- ✦ Number of employees or technology devices at or supported through a site
- ✦ Business impact of an outage at a particular location

By implementing a tiered approach, resources will be focused on areas of DEP that present the greatest impact to the organization. Based on the tiered approach, OT personnel will be assigned to the highest impact locations across the state to maximize support of the business. These locations will experience a higher relative level of system availability, reliability and service.

High impact (Tier 1) locations meet one or more of the following criteria:

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- ✦ 50 or more employees and/or technical devices supported by OT at that site.
- Is actively involved with emergency response.

This approach could result in lower levels of service at smaller locations that do not meet the above criteria.

TIER 1	
Tier 1	DEP sites > 50 employees or PCs Outage Support: will be located on-site or within 30 minutes from the site On Call: 24x7 Outage: Dispatch immediate with response < 2 hours
Tier 2*	DEP sites > 25 employees Outage Support: within 60 minutes from the site On Call: 24x5 -- Emergency 24x7 Outage: Dispatch immediate response < 24 hours
Tier 3	Manned sites < 25 employees Support: within 90 minutes from the site On Call: None Outage: Dispatch Next Business Day Response < 4 business days

*OT will escalate dispatch to a site at the request of DEP management.

4 CHARGE BACK

Reassigned employees will report to the Office of Technology effective May 16th, 2007. The salaries and employee benefits costs associated with these employees along with the personal services spending authority will be established under the OT authority on this date. The OT would anticipate an increase in its personal services budgeted activity 001 and the employee benefits activity 010. Per discussion with DEP, they would expect a resulting decrease in their budgeted activity items 001 and 010 and an increase in unclassified expenses 099.

The billing methodology for the entities formerly known as the Governor's Office of Technology (GOT) and WVNET will remain unchanged. The OT infrastructure labor charges will change to a rate based upon labor and other variables discussed below. All other IS&C services will continue to be billed under the established rate structure in effect at the present time. The expectation for all billing methodologies are based on the following guiding principles:

- Rates must be equitable
- Rates must be reasonable and competitive
- Compliance requirements related to the State's IT practices, such as legal licenses for all software, must be met

The labor rate for the DEP employees that are transferred to OT (Appendix 7.1) will be derived from their loaded salary on the effective date of their transfer and invoiced as described in the invoicing section below. Loaded cost includes salary (001), increment (004), administrative fees (010), Social Security matching (011), insurance (012), and retirement (016) costs. Other miscellaneous expenses such as 1% PEIA reserve transfer will be billed annually, upon receipt of bill from PEIA. Any applicable BRIM insurance premiums, travel, cellular charges, and training will be direct billed to the agency on a monthly basis at cost. In addition, any contracts in place that utilize IT vendors as supplemental staff (Appendix 7.3) will be added to the bundled labor rate as those contracts end and OT assumes responsibility for those services. This approach will transition from the current interim labor rate direct-bill approach to a tentative provisional labor rate approach which will be adjusted to actual costs as discussed in the second paragraph of the transition from interim rates section below and then to rates for specific shared and bundled services.

The hardware and software maintenance contracts will continue to be paid by the cost center currently making payments. The decision of which hardware and software maintenance contracts are transferred to OT will be made on a case-by-case basis in the future.

DEP will be responsible for all utilities, rent, floor space and ancillary supplies for all personnel transferred to the OT but remaining at a DEP location.

Invoicing

OT utilizes the Internal Service Fund financial model, which permits OT to recover the costs of the service that it provides by charging for the usage of that service in a manner similar to a private enterprise but without the profit motivation.

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Invoicing for the interim labor rate, documented in the section above, will be in the form of a standard invoice with attached supporting documentation for amounts paid. The salary and benefits amounts will be based upon the actual payroll of the DEP employees transferred and listed in Appendix 7.1. These invoices will be issued immediately following the end of the pay period dates such as the 15th, 16th or 30th 31st of every month. The summary page of the invoice serves as the invoice to allow Inter-Governmental Transfers (IGT), which the DEP will utilize to process its payment to OT using the state's accounting system WVFIMS. DEP may submit any billing inquiries or requests for billing adjustment to the OT by notifying the contact individual on the invoice. Invoices should be paid under the 027 object code.

Transitioning from Interim Rates

The proposed interim labor rate approach will likely apply through the end of the calendar year 2007, but will not exceed an eighteen (18) month period commencing from the date of the MOU. As transformation occurs, the pool of expenses charged under the labor rate approach will gradually give way to rates for specific shared and bundled services. Bundled services have the potential of including direct labor, contracts, hardware, software and other direct costs required by OT to provide technology service delivery for the desktop and associated centralized services. Those services not utilized by all customers are not in the bundled approach.

Upon completion of the interim period or the calendar year 2007, whichever is shorter, all historical data gathered will be utilized to determine and calculate a "true-up" to actual expenses used. In the event the interim period extends beyond calendar year 2007 the next scheduled true-up would be June 30, 2008 and on every fiscal year thereafter. This historical data will consist of a number of trouble tickets generated and hours incurred in support of the trouble tickets generated. The true-up will consist of a comparison of the cost billed per month over the interim period to actual costs rendered. These actual costs rendered could include charges for hours worked by employees from other agencies not included in the listing of DEP employees in Appendix 7.1. All direct charges and overhead costs incurred for the employees, such as annual and sick leave time, training and administrative time will be allocated based upon the jobs or projects worked during the period analyzed in the comparison.

As cost savings are identified, the costs to agencies will decrease on a case-by-case basis. For example, if servers in a building were consolidated in one location, the lowered direct costs of doing so would be proportionally shared among the users of those servers. In another example, if OT negotiates a lower rate for anti-virus software, then all agencies will benefit.

Under such an incremental change scenario, as further cost savings and service improvements are attained impacting more agencies, service levels will tend to become more consistent across all agencies. Such a trend will make a future change to standard statewide rates much easier than what could be achieved today, given the current state of widely disparate IT environments and service levels.

It is OT's goal to transition/consolidate all in-scope agencies and migrate to the bundled services billing approach. OT's cost allocation methodologies will be invoked to support a shared services model among multiple agencies. The methodology will be applied individually to each prospective service, with both direct and indirect costs identified.

5 AGENCY CONTACTS

Each agency shall designate a contact person or persons for each of the activities described in this Memorandum. The contact information shall include name, title, mailing and physical address, telephone number, e-mail address, fax number, and a designation of which activities the person is designated to handle.

The Office of Technology designates the individual(s) below to provide regular information to DEP:

For inquires associated with performance measures contact:

Kyle Schafer, CTO
304-558-8101
kschafer@wvgot.org

For inquires associated with finances or chargeback
Bryan Hoffman, Administrative Services Manager/Finances
304-558-8108
bhoffman@wvadmin.gov

For inquires associated with Information Security or Physical Security contact
Jim Richards, Director of IT Security
304-558-8107
jrichards@wvgot.org

For inquires associated with Telecommunications contact
Marc Coleman, Director of Operations/Infrastructure
304-558-8110
mcoleman@wvgot.org

For inquires associated with Messaging Services contact
Jennifer McCarty, Director of Information Services
304-558-8106
jmccarty@wvgot.org

For inquires associated with Platform Services, Desktop Services, Technology Service Desk or Hosting Services contact
Kathy Moore, Director of Client Services Delivery
304-558-8109
kmoore@wvgot.org

All of the above-mentioned employees are located at the following address:

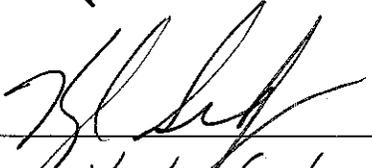
WV State Office of Technology
One Davis Square
321 Capitol Street

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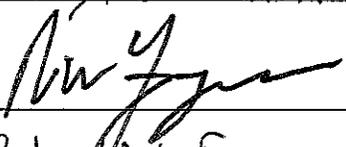
6 SIGNATORIES

DEP Secretary
Accepted by:  ^{for} Date: 4/9/07

Printed Name: Stephanie R. Timmermeyer

OT CTO
Accepted by:  Date: 4/10/07

Printed Name: Kyle Schreier

DOA Secretary
Accepted by:  Date: 4/12/07

Printed Name: Robert W. Ferguson, JR.

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Charleston, West Virginia 25301

DEP designates the individual(s) below to provide information to:

Jerry Forren, CIO
jforren@wvdep.org
(304) 926-0499 X 1310

7 APPENDIX

**7.1 DEP – TRANSFERRING EMPLOYEES
LISTING**

Name	Title
BURNS, GARY W	8318 INFO SYS SPEC II
DEBRUYN, PHILLIP M	8319 INFO SYS SPEC III
Vacancy, DOYLE, KELLI L	8317 INFO SYS SPEC I
HOYMAN, CARLA JEAN	8317 INFO SYS SPEC I
JEFFREY, BRIAN L	8279 INFO SYS SPEC 4
Vacancy PAYTON, SAMUEL RICHARD	8319 INFO SYS SPEC III
PIERCE, SHAUN D	8318 INFO SYS SPEC II
Vacancy, THACKER, HOWARD K	8317 INFO SYS SPEC I
WHYTE, REBECCA ANN	8317 INFO SYS SPEC I
Vacancy - MCKINNEY, EDWARD EARL	
Vacancy - DUNLAP, JOHN	
Vacancy – Lewis, Laurie	

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7.2 DEP – IT Related expenses by Year/Division

Agency or Department	Data	App Labor	Billed	Contract	Direct	Infra Labor	Maint	Telecom	Grand Total
AIR QUALITY BOARD	Sum of 2004		\$473.06	\$310.00	\$1,785.77			\$0.00	\$2,568.83
	Sum of 2005		\$1,596.73	\$130.00	\$1,983.84			\$2,202.07	\$5,912.64
	Sum of 2006		\$1,245.23	\$113.75	\$196.22			\$271.33	\$1,826.53
ENVIRONMENTAL PROTECTION	Sum of 2004	\$1,623,239.21	\$155,448.29	\$820,092.29	\$2,834,464.23	\$1,322,684.82	\$234,644.43	\$0.00	\$6,990,573.27
	Sum of 2005	\$1,623,239.21	\$159,220.43	\$561,869.33	\$1,502,334.32	\$1,322,684.82	\$171,407.00	\$439,726.15	\$5,780,481.26
	Sum of 2006	\$1,623,239.21	\$148,023.93	\$399,915.31	\$830,989.26	\$1,322,684.82	\$167,932.23	\$317,140.50	\$4,809,925.26
ENVIRONMENTAL QUALITY BOARD	Sum of 2004		\$60.41	\$667.50	\$5,512.70			\$0.00	\$6,240.61
	Sum of 2005		\$624.96	\$130.00	\$3,323.29			\$491.83	\$4,570.08
	Sum of 2006		\$1,245.32	\$178.75	\$1,425.22			\$271.34	\$3,120.63
OIL & GAS CONSERVATION COMMISSION	Sum of 2004		\$593.58		\$0.00				\$593.58
	Sum of 2005		\$379.18		\$1,794.32				\$2,173.50
	Sum of 2006		\$445.55		\$0.00				\$445.55
SOLID WASTE MANAGEMENT BOARD	Sum of 2004		\$9,155.57		\$16,242.44			\$0.00	\$25,398.01
	Sum of 2005		\$7,564.25		\$3,404.30			\$4,078.94	\$15,047.49
	Sum of 2006		\$2,974.75		\$7,710.46			\$1,857.61	\$12,542.82
Total Sum of 2004		\$1,623,239.21	\$165,730.91	\$821,069.79	\$2,858,005.14	\$1,322,684.82	\$234,644.43	\$0.00	\$7,025,374.30
Total Sum of 2005		\$1,623,239.21	\$169,385.55	\$562,129.33	\$1,512,840.07	\$1,322,684.82	\$171,407.00	\$446,498.99	\$5,808,184.97
Total Sum of 2006		\$1,623,239.21	\$153,334.78	\$400,207.81	\$840,321.16	\$1,322,684.82	\$167,932.23	\$319,540.78	\$4,827,860.79

7.3 Contract/Professional Services

Vendor	2004	2005	2006	Grand Total
ACCESS SYSTEMS				
BLACK BOX		\$490.00		\$490.00
CDI CORP	\$704,874.79	\$550,620.33	\$383,462.66	\$1,638,957.78
CDI INFORMATION	\$111,008.40			\$111,008.40
CHARTER COMMUNICATIONS	\$3,956.00	\$2,967.00		\$6,923.00
DOMINION SYSTEMS LLC	\$241.67			\$241.67
FIBERNET LLC		\$7,792.00	\$8,832.00	\$16,624.00
MANPOWER TEMPORARY SERVICES INC			\$196.20	\$196.20
SILICON GRAPHICS COMPUTER SYS	\$11.43			\$11.43
TERRADON COMMUNICATIONS GROUP LLC			\$7,150.00	\$7,150.00
VERIZON			\$274.45	\$274.45
WV DESIGNS	\$977.50	\$260.00	\$292.50	\$1,530.00
Grand Total	\$821,069.79	\$562,129.33	\$400,207.81	\$1,783,406.93

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7.4 Server Counts by Location

Department of Environmental Protection	Charleston	62
	Fairmont	1
	Logan	3
	Oak Hill	2
	Philippi	2
	Romney	1
	Wheeling	1
Department of Environmental Protection Total		72
Grand Total		72

7.5 Employees By Location

BECKLEY	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	1
BELINGTON, WV 26250	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	1
BUCKHANNON	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	2
BURNSVILLE	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	1
CHARLESTON	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	479
	ENVIRONMENTAL QUALITY BOARD	4
	OIL AND GAS CONSERVATION COMMISSION	2
	SOLID WASTE MANAGEMENT BOARD	11
CLENDENIN, WV 25045	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	1
DANIELS, WV 25832	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	1
DUCK, WV 25063	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	1
ELKVIEW	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	7
FAIRMONT	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	29
FRAMETOWN, WV 26623	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	1
FRENCH CREEK	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	3
GASSAWAY	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	1
HUNTINGTON	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	2
LOCHGELLY, WV 25866	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	1
LOGAN	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	59
MARTINSBURG	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	1

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	OF	
NEW CREEK	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	2
OAK HILL	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	89
PARKERSBURG	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	6
PHILIPPI	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	79
RED HOUSE	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	1
RIPLEY	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	2
ROMNEY	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	12
SALEM	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	2
SPENCER	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	1
SUMMERSVILLE	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	3
TEAYS	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	16
WELCH	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	19
WESTON	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	1
WHEELING	ENVIRONMENTAL PROTECTION, DEPARTMENT OF	19
Grand Total		860

7.6 Inventory of Assets

	Count	Date of Inventory
Personal Computers	686	03/15/2007
Laptop Computers	484	03/15/2007
Telephones	1013	04/10/2007
Network IDs	976	04/01/2007
Personal Data Assistants (PDA)	8	04/01/2007