MEMORANDUM OF UNDERSTANDING

BETWEEN THE

WEST VIRGINIA OFFICE OF TECHNOLOGY

AND THE

WEST VIRGINIA

DEPARTMENT OF

ENVIRONMENTAL PROTECTION

7/22/10

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The West Virginia Office of Technology (OT) is responsible for delivery and support of statewide enterprise Information Technology (IT) infrastructure, including hardware, operating systems, enterprise applications, and communications. The West Virginia Department of Environmental Protection(DEP)'sIT 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, as follows:

Section 1 – Introduction – Provides an Executive Overview and General Terms of this MOU.

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

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

Section 4 – Chargeback – 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 OT and DEP, this Memorandum of Understanding (MOU) is entered into this 1st day of August, 2010.

1.2 Executive Overview

Pursuant to West Virginia Code §5A-6-1 *et seq.*, OT is responsible for the State's technical infrastructure and providing quality technology services. OT's 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, OT's customers should have the full expectation that their base 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 through the following: 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 a cost structure to provide such services.

1.3 Implementation Phases of the MOU

OT and DEP will reach an agreement on the framework for services, roles and responsibilities, and the implementation of this framework into daily operations. 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, 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.

The service level objectives will be reevaluated after one (1) year to adjust performance targets based on actual results achieved.

1.4 General Terms

1. The MOU is in effect for four (4) years, effective on this August 1, 2010 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 OT's Director of Client Services or as requested by DEP management.

2. DEP will provide on-site OT personnel with adequate office space and furniture to perform its specific duties at no charge to OT. This space will be limited to what OT currently occupies in the Kanawha City Location, DEP office space. DEP will allow the furniture and equipment currently utilized by employees transferring to OT to remain with that employee until the end of the equipment's life at which time it will be returned to DEP for disposal. All equipment purchased by DEP will remain on the books as property of DEP, although it will be in use by OT employees.

3. OT is responsible for ensuring that sufficient infrastructure, technologies, and staff is maintained to provide services as defined in the MOU. An OT Relationship Manager will be assigned to each consolidated agency. The Relationship Manager will serve as a liaison within the OT for the agency and will ensure the agencies requirements are identified, prioritized, and addressed.

4. OT will make reasonable efforts to assure that no DEP facility or data will be compromised by an OT employee who poses a threat to the safety of DEP employees or clients. As such, OT warrants that all OT employees used on DEP projects will have undergone a criminal background check, completed OT security training, and a yearly review and signed acknowledgement of the OT Confidentiality Statement (see Appendix 3).

5. OT is responsible for managing the performance of subcontractors 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 level 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. 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). It is the responsibility of DEP to provide the Office of Technology a copy of its COOP. In the absence of DEP's COOP, DEP is responsible for identifying and prioritizing the criticality of its applications and reporting this to the Office of Technology with the implementation of this MOU, or as soon thereafter as possible.

8. Systems identified as critical or that require twenty-four-hour-a-day, seven days a week (24x7) support will have on-call support.

9. Service performance measurement and reporting conducted for DEP by OT are

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.

10. Should DEP and OT mutually agree that additional metrics are necessary to more comprehensively measure service level performance, and data are available to provide such metrics, such metrics will be implemented by OT.

This MOU 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 party.

1.5 Exceptions

1.5.1 OT will facilitate hardware maintenance for the Building Security system located at 601 57th Street, Charleston, WV.

1.5.2 OT Employees will sign for any equipment currently assigned to them, sign in and out hardware, and secure necessary paperwork/approvals for any equipment moves.

1.5.3 In reference to Section 1.4, number 2 of this agreement, OT recognizes that DEP has limited physical space available in the Kanawha City location and, as such, OT will not request additional physical space to house OT technicians beyond what OT currently occupies in the Kanawha City location.

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. Systems will be centralized, consolidated, and / or virtualized where practical and distributed where required. The DEP IT Application Development group will be responsible for agency specific business application support including requirement definition, application design, maintenance, and application performance. OT will be responsible for the design, implementation, and maintenance of the infrastructure to support those 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 this hosted model, OT will combine hardware, software, networking technologies, and technical expertise to provide superior performance, increased security, and 24/7 availability as effectively and affordably as possible.

The following are available within Platform Services:

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

Platform Services may provide the following key benefits:

- 24 x 7 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; and
- 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.
PRE-SCHEDULED DOWNTIME REQUIREMENTS	All pre-scheduled system downtime and maintenance, unless otherwise agreed upon in advance by DEP, will occur as follows: • For the systems with 24x7 requirements, all pre-scheduled maintenance shall be performed based on OT's Change Management process and during agreed scheduled maintenance windows. • For systems having non-24x7 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	N/A
Development Servers	Aggregate Availability	OT agrees to offer high availability services during normal business hours and other periods as agreed upon	N/A

Performance percentage will be calculated from available system uptime records of critical devices. Service interruptions and outages will be reported back to DEP on a monthly basis. In order for OT to guarantee such high minimum performance levels, production hardware must be supportable by the manufacturer and operating system software must not be more than two versions old. This standard also requires DEP's application software be kept up to date with current platforms.

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, Smart Phones, 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 (e.g., smart phones, PDAs, handheld scanners);
- Best effort attempts to resolve issues with locally attached peripheral devices (e.g., personal printers, exclusive of consumables); and
- Refreshing of desktop and laptop computing hardware dependent on DEP funding.

Desktop Services can provide the following key benefits:

- Statewide on-site technical support;
- Supported software license coordination or management;
- Standardized desktop and user computing environment (hardware and software);
- Improved security and reduce risk/vulnerabilities in the desktop/user computing environment;
- Improved asset management and control; and
- IT staff who 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
Enhanced Support	7x24 (as needed)

SERVICE DEFINITION	Desktop services are initiated by incident trouble tickets or service requests to repair, install, modify, 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 (2) business hours from time of receipt of Incident Trouble Ticket to contact by technician	90%
		Sev 2 – eight (8) business hours from time of receipt of Incident Trouble Ticket to contact by technician	90%
		Sev 3 – two (2) business days from time of receipt of Incident Trouble Ticket to contact by technician	90%
		Sev 4 – five (5) 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	Five (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 OT's problem management system. Every ticket will be assigned a severity level based on customers' needs and expectations. The amount of time it takes an OT employee to respond to its customer once a problem is reported will be captured in OT's 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 for 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 (100) 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, out of the one hundred (100) calls, ninety-two (92) 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.

2.1.3 Communication and Messaging Services

2.1.3.1 *Service Definition*

Communication and Messaging Services are the services and activities required to provide and support the email infrastructure; interpersonal communications computing; and the infrastructure needed to support wireless connectivity, wireless communications, and handheld devices. Additionally, "Communication and Messaging Services" includes Voice Services which 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.

"Communication and Messaging Services" are defined as all activities associated with the provision of Software and support of DEP's communication and messaging environment that are capable of connecting to OT's Voice and Messaging Services infrastructure directly.

OT provides and supports an agreed to and approved standard communication and messaging infrastructure environment on the in-scope computing and voice platforms.

The following are available within the Communication and Messaging Services family:

- Voice conferencing;
- Cellular Contract Management;
- Voice over Internet Protocol (VoIP) Services/Telephony;
- 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;
- Email messaging support;
- E-fax support;
- Central email archiving as required by DEP;
- Call Center management;
- 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; and
  - Online meetings and application sharing;
- Instant Messaging;
- Data Conferencing;
- Mailbox Management;
- Secure encrypted messaging as required by DEP; and
- Messaging Security support that includes the following:
  - Content filtering for virus prevention and spam management; and
  - Perimeter security support to cover management of email traffic at the enterprise border.

Communication and Messaging Services can provide the following key benefits:

- Automated deployment and configuration of State Standard messaging applications;
- Automated virus and spam filtering to prevent viruses, worms, and spam from entering the email system;
- Tracking and management of messaging software licenses.
- Incident management to resolution including tracking, escalation and third-party dispatch;
- Knowledgeable and experienced staff; and
- Plan, design, and implementation of voice integration and optimization.

2.1.3.2 *Service Availability Objectives*

"Communication and Messaging service availability" is defined as the time during which the primary 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.

All scheduled maintenance shall be performed during OT-defined change management windows. DEP will receive advanced notification of all planned outages. Other additional component downtime will be managed during non-operational windows, if possible, based on the criticality of the situation.

COMMUNICATION AND 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%
Central IPT Voice System	Availability	Sun-Sat, 00:00-24:00	99.00%
Legacy Voice Systems	Response	Mon-Fri, 07:30-17:30	Immediate response upon notification or detection of problem

Performance percentage will be calculated from available system uptime records of primary central email systems. Service interruptions and outages will be reported back to DEP on a monthly basis. Minimum performance percentages will be calculated by dividing the number of minutes that the service was not available by the total number of minutes the system platform should have been available.

2.1.4 Network and Video Services

"Telecommunication Services" is a category of services that includes the infrastructure to support secure and reliable data 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 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 State Data Center Access and Application Access, and Consulting and Engineering support.

The following support is available, within the Network Services family:

- OT State Data Center Access and Application Access;
- Provisioning of new or changed service requirements;
- Internet Access;
- Standard WAN Equipment;
- WAN administration and design;
- MAN administration and design;
- LAN administration and design;
- LAN Equipment;
- Remote access/ VPN;

- Cabling and wiring;
- ISDN & Key System Equipment and End User Support;
- Wireless Network Equipment;
- Wireless Network Administration
- Throughput and Bandwidth Management; and
- 24X7 Network Monitoring.

Network Services can provide the following key benefits:

- Statewide network coverage;
- Incident management to resolution including tracking, escalation, and third-party dispatch;
- Knowledgeable and experienced staff for the data network services; and
- 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. OT will be responsible to DEP to ensure video services are available and are of acceptable quality to DEP.

The following are available within the Video Services family:

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

Video Services can provide the following key benefits:

- Identification of fully-equipped facilities;
- In-house solution to both services and procurement; and
- Knowledgeable and experienced staff for the video services.

2.1.4.3 *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%
Video	Availability	Mon-Fri, 07:30-17:30	TBD
Internet Access	Availability	Sun-Sat, 00:00-24:00	99.00%

Performance percentage will be calculated from available system uptime records of critical devices. As OT's problem management system and process mature, the customer effect of the outage will be calculated through trouble tickets or incidents logged into OT's problem management system. 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, then dividing by the total number of minutes the service type should have been available.

2.1.5 Account Provisioning Services

2.1.5.1 *Service Definition*

The current migration to a single Domain model will allow DEP to take full advantage of the established process and procedures for provisioning accounts. This ensures provisioning is accountable, auditable, and responsive, and further provides for a robust security posture with respect to Enterprise Account Administration.

The Office of Technology will provide account provisioning within the following scope:

- Network
- Email
- VPN
- Mainframe
- file and share resources
- other infrastructure applications

The DEP will continue to be responsible for account provisioning within the DEP's agency specific applications.

2.1.5.2 *Service Level Objectives*

Account Provisioning Service Level Requirements			
Activity	**Service Measure**	**Performance Target**	**Minimum Performance %**
Account creation or modification request	Elapsed Time	Within 2 business days of request	95%
Account disable request	Elapsed Time	Within 2 business days of request or immediate at the request of DEP management	99%
File or resource access request	Elapsed Time	Within 2 business days of request	95%

Minimum performance will be calculated based on date and time of receipt of authorized request by the account management team and the date and time of account creation or modification.

2.2 IT Support Services

2.2.1 Information Security Services (ISS)

2.2.1.1 *Service Definition*

Information Security Services provide 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, hard drive encryption, email encryption, 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. ISS also include the necessary security infrastructure, systems and records management processes.

The following are within the scope of ISS:

- Security advisories and alert services;
- Security policies, processes, standards, and procedures;
- Risk and vulnerability assessment;
- Mandatory Executive Branch information security awareness training
- 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;
- Security audit to support regulatory compliance, legislative compliance, policy compliance, or non-compliance follow-up; and
- Investigations of suspected policy violations, breaches, attacks, or other system anomalies.

ISS can provide the following key benefits:

- Assistance in compliance with laws and regulations involving confidentiality;
- A secure environment in which to perform business activities; and
- The monitoring, management, and remediation of intrusions and network "attacks."

2.2.1.2 *Service Level Objectives*

Security Administration Service Level Requirements			
Activity	**Service Measure**	**Performance Target**	**Minimum Performance %**
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 IT assets
Security incident response	Elapsed Time	Reported within 24 hours of detection or time detection should have occurred.	Immediate response upon detection or notification

Minimum performance will be calculated based on available system information. OT will report security-related issues to DEP immediately. This process would be repeated for each security related incident.

2.2.2 Physical Security Oversight Services – Technology Infrastructure

2.2.2.1 *Service Definition*

Physical Security Oversight Services promotes a secure environment for the computing infrastructure. Physical Security is achieved through setting standards, establishing policy and procedure, identifying security requirements, assuring physical access controls, maintaining an authorized needs-to-enter access list, and monitoring compliance of access activity to established standards and procedures.

The following are within the scope of Physical Security Oversight Services:

- Maintaining security controls definitions, including setting and documenting standards, policies, processes, and procedural controls for computer rooms and other key technology infrastructure locations;
- Auditing physical security standards, policies, processes, and procedures for technical infrastructure; and
- Defining, documenting and operationalizing controls with respect to authorization or de-authorization of computer room access.

2.2.2.2 *Service Level Objectives*

OT will provide policies for Physical Security of IT Resources. Assessments will be scheduled as needed and prioritized appropriately.

2.2.3 Project Management Services

2.2.3.1 *Service Definition*

The Project Management Office (PMO) is responsible for establishing a Project Management Methodology for Information Technology initiatives and oversight for all IT projects. The PMO will either provide Project Management (PM) services, or will oversee the PM services provided by an agency or vendor/ provider to that agency, for IT projects. PM includes development of a documented concept, charter, resource plan, budget, schedule, and deliverable.

All State of West Virginia information technology initiatives are within the scope of the PMO.

The PMO can provide the following key benefits:

- Determine that an initiative must be managed as a project;
- Present a project concept to the Project Steering Committee based upon magnitude/scope;
- Establish a project plan;
- Assure the integration of appropriate controls into any resulting system or IT component;
- Determine the critical path to completion;
- Manage project documentation;
- Manage project resources;
- Control project scope;
- Prioritize project with respect to competing priorities;
- Reduce failed projects, reduce re-work / change order, maintain fidelity with Charter, and sponsor goals / objectives; and
- Manage the project to an on-time, on-budget completion while accomplishing the desired outcome

2.2.3.2 *Service Level Objectives*

OT will ensure technology projects follow an established project management methodology which will allow for the greatest opportunity of success.

2.2.4 Technology Service Desk

2.2.4.1 *Service Definition*

The 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 the following: 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, and DEP is periodically provided verbal or written status updates.

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; and
- Root cause analysis.

The Technology Service Desk can provide the following key benefits:

- Management of DEP's problems until resolved to its satisfaction (Note: Requests for new and/or enhanced services are not considered problems and will be submitted to the Project Management Office for prioritization);
- An understanding of DEP's business and the ability to get DEP back to work as quickly as possible when technology problems occur;
- The establishment and maintenance of positive, long-term DEP relationships through open communication and continuous feedback;
- The provision of high-level DEP service and technical expertise; and
- A rapid and positive response to all DEP inquiries.

2.2.4.2 *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

Response Time Service Level Requirements			
Technology Service Desk Responsiveness	Service Measure	Performance Target	Minimum Performance %
	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 OT's phone system.

Minimum performance for Delivered as Promised, Email Ticket Response, Password Reset, and First Call Resolution will be calculated based on trouble tickets or incidents logged into OT's problem management system. Minimum performance percentages will be calculated by summing the total number of tickets by each service type meeting the performance target and dividing by the total number of tickets 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 its service level objective for that month. Similar processes would be repeated for each service type.

Every ticket will be assigned a severity level based on customers' needs and expectations. The Service Desk is then responsible for the prioritization of all requests and the assurance that service level obligations are met. If DEP employees bypass the Service Desk and contact OT personnel directly for support, those requests may be entered into the system as low priority. This is necessary in order to avoid conflicts with the Service Desk prioritization process.

Satisfaction with OT will be determined by random surveys of closed trouble tickets. These surveys will be conducted by OT and the results reviewed by DEP. If overall DEP customer satisfaction drops below 90%, OT will negotiate corrective action with DEP and will implement a corrective plan.

2.2.5 IT Training

2.2.5.1 *Service Definition*

IT Training is a key component in ensuring employees are able to fully utilize the productivity tools they have been provided. The OT Technology Learning Center provides IT training opportunities through a variety of methods. IT Training services include:

Training for individual employees:

- Instructor-led classroom
- Virtual classroom
- Self-paced web-based training

Systems and Services for agencies:

- Online registration and scheduling tools. Customers who are sponsoring conferences utilize this tool to register attendees and schedule them for individual conference sessions.
- A Learning Management System to deliver and track online training
- Custom development of web based training services

2.2.5.2 *Service Level Objectives*

All employees will have the opportunity for training prior to roll-out of new technologies. Employees can enroll on on-line courses at any time. Instructor led classes are on a first-come first-serve basis. Classes are scheduled upon demand.

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	1st Escalation	2nd Escalation	3rd Escalation	4th 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, and
- Business impact of an outage at a particular location

By implementing a tiered approach, OT will focus 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:

- Has 50 or more employees and/or technical devices supported by OT at that site;
- Serves as a primary Call Center for DEP; or
- 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.

	Facility Type	Support Type
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*	**Manned 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 CHARGEBACK

The Office of Technology is a "cost of service" organization. The Office of Technology receives 100% of its revenue via a fee for service rate structure. All OT services have the potential of including direct labor, contracts, hardware, software, and other direct and indirect costs required by OT to provide technology service delivery for all associated centralized services.

The expectations 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

DEP will provide the OT a copy of all current hardware and software maintenance contracts they currently hold, and these 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 OT but remaining in the agency's 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.

The OT will continue to issue monthly billing amounts based upon the rate structure established at the time of the billing. These invoices will be issued under the current practices. The summary page of the invoice serves as the invoice to allow Inter-Governmental Transfers (IGT), which DEP will utilize to process its payment to OT using the state's accounting system. 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.

Currently there are several core services that essentially all agencies will be charged for on a per unit per month basis. These include E-Mail, Network Engineering, PC Support, Telephony Support, and User Account Management. The units are based upon a count performed during the spring of each year. The OT Services Catalog provides descriptions of all OT services, what the service means, and how it will be charged. The catalog can be found on the OT website under Products and Services, then select Rates Catalog or the link below.

http://www.technology.wv.gov/ProductsAndServices/Pages/RatesCatalog.aspx

SIGNATORIES

Office of Technology

Accepted by: _____ Date: 8/20/10

Printed Name: Kyle D. Schafer, Chief Technology Officer

Department of Administration

Accepted by: _____ Date: 8-20-10

Printed Name: Robert W. Ferguson, Jr., Cabinet Secretary

Department of Environmental Protection

Accepted by: _____ Date: 9/1/10

Printed Name: Randy C. Huffman, Cabinet Secretary

APPENDIX 1 - AGENCY CONTACTS

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

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

For inquiries associated with performance measures,
contact:
Kyle Schafer, CTO
304-558-8101
kyle.d.schafer@wv.gov

For inquiries associated with finances or chargeback,
contact:
Bryan Hoffman, CFO
304-558-8108
bryan.m.hoffman@wv.gov

For inquiries associated with Information Security Services, Physical Security Services or Project Management Services,
contact:
Jim Richards, Director of IT Security
304-558-8107
jim.a.richards@wv.gov

For inquiries associated with Telecommunications, Platform Services and Hosting Services,
contact:
John Dunlap, Manager of Operations/Infrastructure
304-558-8145
john.d.dunlap@wv.gov

For inquiries associated with Relationship Management, Desktop Services, Account Provisioning Services, Messaging Services, Technology Service Desk, or IT Training
contact:
Kathy Moore, Deputy CTO, Director of Client Services Delivery
304-558-8109
kathy.a.moore@wv.gov

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

WV State Office of Technology
1900 Kanawha Blvd., E
Bldg. 5, 10th Floor
Charleston, West Virginia 25305

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

Name: _____

Telephone Number: _____

Name: _____

Telephone Number: _____