



**Commonwealth of Pennsylvania**  
**Office of Administration / Information Technology**

**Schedule F-1**  
**Service Level Matrix**

SLA Ref#	Service Category	Service Level Type	Service Level Class	Pool Allocation	Service Level Description	Service Measurement	Definition	Measurement Window	Service Level Reporting Window	Continuous Improvement	Minimum Service Level	Target Service Level
1	CTMS	1	CPI		Availability	Availability	The Service Level Availability for all functions of the Commonwealth's Telecommunication Management System.	Monthly	Monthly	N	99%	99.5%
2	CTMS	1	GPI		Service Order Completion	Timeliness	The number of Service Orders completed from receipt of Service Order and the greater of the corresponding Standard Service Interval or the corresponding Customer Request Date expressed as a percentage. Measurements will be taken from the time stamps in the order processing system.	Monthly	Monthly	N	95%	98%
3	Help Desk	1	KPI		Abandoned Calls	Quality	The percentage of calls in queue abandoned by the caller after 30 seconds but before connecting to a help desk agent must be less than or equal to five percent (5%) of all calls.	Monthly	Monthly	N	<5%	<2%
4	Help Desk	1	KPI		Time Required to Answer	Timeliness	The percentage of calls answered to within 30 seconds by a help desk agent.	Monthly	Monthly	N	95%	98%
5	Help Desk	1	CPI		Trouble Ticket Response	Timeliness	The percentage of trouble tickets Responded to within 30 minutes from the opening of a ticket.	Monthly	Monthly	N	95%	100%
6	Data Managed Network Services	1	CPI		Time to Restore GOLD	Timeliness	The length of time to Resolve an Incident and restore services categorized as Gold services.  The average elapsed time from trouble ticket creation to Resolution shall not exceed the Service Level.	Monthly	Monthly	N	4 hours	2 hours

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7	Data Managed Network Services	1	CPI		Time to Restore SILVER	Timeliness	The length of time to Resolve a problem and restore Services categorized as Silver services.  The average elapsed time from trouble ticket creation to Resolution shall not exceed the Service Level.	Monthly	Monthly	N	8 hours	4 hours
8	Data Managed Network Services	1	CPI		Time to Restore BRONZE	Timeliness	The length of time to Resolve a problem and restore Services categorized as Bronze services.  The average elapsed time from trouble ticket creation to Resolution shall not exceed the Service Level.	Monthly	Monthly	N	12 hours	8 hours
9	Help Desk	1	KPI		Chronic Problem	Timeliness	Chronic problems to be fully addressed pursuant to the Chronic Definition and Triage Process.	Monthly	Monthly	N	100%	100%
10	Enterprise Services	1	KPI		Service availability ENTERPRISE	Availability	For the following Services: Internet Access, Remote Access, Business Partner DMZ, COPANET Management, VOIP and Email Scanning, Services shall have Availability equal to or greater than the Service Level.	Monthly	Monthly	N	99.999%	100%
11	Enterprise Services	1	CPI		Service availability ENTERPRISE	Availability	Internet Access Network Services Availability for the Enterprise must be equal to or greater than the Service Level.	Monthly	Monthly	N	99.999%	100%
12	Enterprise Services	1	CPI		Service availability ENTERPRISE	Availability	Remote Access Services Availability for the Enterprise must be equal to or greater than the Service Level.	Monthly	Monthly	N	99.999%	100%
13	Enterprise Services	1	CPI		Service availability ENTERPRISE	Availability	Business Partner DMZ Services Availability for the Enterprise must be equal to or greater than the Service Level.	Monthly	Monthly	N	99.999%	100%
14	Enterprise Services	1	CPI		Service availability ENTERPRISE	Availability	COPANET Management Services Availability for the Enterprise must be equal to or greater than the Service Level.	Monthly	Monthly	N	99.999%	100%

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15	Enterprise Services	1	CPI		Service availability ENTERPRISE	Availability	VOIP Services Availability for the Enterprise must be equal to or greater than the Service Level.	Monthly	Monthly	N	99.999%	100%
16	Enterprise Services	1	CPI		Service availability ENTERPRISE	Availability	Email Scanning Services for the Enterprise must be equal to or greater than the Service Level.	Monthly	Monthly	N	99.999%	100%
17	Enterprise Services	1	CPI		Service restoration ENTERPRISE	Timeliness	For the following Services: Internet Access, Remote Access, Business Partner DMZ, COPANET Management, VOIP and Email Scanning - The amount of time to restore a loss (outage) or Major Degradation of Service shall not exceed the Service Level..	Per Incident	Monthly	N	30 min	15 min
18	Enterprise Services	2	KPI		Service availability ENTERPRISE	Availability	COPANET Services for the Enterprise must be equal to or greater than the Service Level.	Monthly	Monthly	N	99.999%	100%
19	Enterprise Services	1	CPI		Backbone Roundtrip Delay	Quality	Average monthly roundtrip delay for each backbone link must be less than or equal to 100 ms.	Monthly	Monthly	N	100ms	80ms
20	Enterprise Services	1	CPI		Backbone Packet Loss	Quality	Monthly percentage of lost packets must be less than or equal to the Service Level.	Monthly	Monthly	N	< 1%	< 0.5%
21	Data Managed Network Services	1	CPI		Service Availability GOLD	Availability	All Gold Data Managed Network Services shall have Availability equal to or greater than the Service Level.	Monthly	Monthly	N	99.99%	99.995%
22	Data Managed Network Services	1	CPI		Service Availability SILVER	Availability	All Silver Data Managed Network Services shall have Availability equal to or greater than the Service Level.	Monthly	Monthly	N	99.90%	99.95%

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23	Data Managed Network Services	1	KPI		Service Availability BRONZE	Availability	All Bronze Data Managed Network Services shall have Availability equal to or greater than the Service Level.	Monthly	Monthly	N	99.00%	99.50%
24	Voice Services	1	CPI		Service Availability	Availability	All Voice Services shall have Availability equal to or greater than the Service Level.	Monthly	Monthly	N	99.00%	99.50%
25	Security Services	1	CPI		Managed Firewall Service	Availability	All Managed Firewall Services shall have Availability equal to or greater than the Service Level.	Monthly	Monthly	N	99.99%	99.995%
26	Security Services	1	CPI		Managed Firewall Service	Timeliness	The time to complete orders for Firewall Services from order to fulfillment and operability shall not exceed the Service Level.  For purposes of this Service Level, "Firewall Services" include access control list updates, network diagnostics, equipment service, software and configuration updates, and data archival (backups, off-site storage).	Monthly	Monthly	N	5 days	3 days
27	Security Services	1	KPI		Managed Intrusion Detection and Prevention	Availability	All intrusion Detection and Prevention Services (including IDS/IPS components) shall have Availability equal to or greater than the Service Level.	Monthly	Monthly	N	99.99%	99.995%
28	Security Services	1	CPI		Managed Intrusion Detection and Prevention	Timeliness	All Security Incident s shall be managed according to the Security Incident Priority procedures, and Contractor will notify the Commonwealth of Security Incidents pursuant to such procedures.	Monthly	Monthly	N	100%	100%

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29	Security Services	1	KPI		Managed Intrusion Detection and Prevention	Timeliness	The time to complete orders for Intrusion Detection and Prevention Services from order to fulfillment and operability shall not exceed the Service Level.  For purposes of the Service Level, "Intrusion Detection and Prevention Services" includes all IDS/IPS components, signature/profile updates, network diagnostics, equipment service, software and configuration updates, and data archival (backups, off-site storage).	Monthly	Monthly	N	5 days	3 days
30	Security Services	1	KPI		Managed Virtual Private Network	Availability	All Virtual Private Network Services shall have Availability equal to or greater than the Service Level.  For purposes of this Service Level, "Virtual Private Network Services" includes the availability of site-to-site and remote access VPN services.	Monthly	Monthly	N	99.99%	99.995%
31	Security Services	1	KPI		Managed Virtual Private Network	Timeliness	The time to complete orders for all Virtual Private Network Services routine and emergency user additions, additions deletions of VPN tunnels, and policy modifications to the time of fulfillment and operability shall not exceed the Service Level.	Monthly	Monthly	N	5 days of requested change	3 days of requested change
32	Security Services	1	KPI		Security Services Time to Respond	Timeliness	The time to Respond to all Security Services shall not exceed the Service Level.	Monthly	Monthly	N	2 hours	2 hours
33	Security Services	1	KPI		Security Services Time to Restore	Timeliness	The time to Restore all Security Services shall not exceed the Service Level.	Monthly	Monthly	N	4 hours	2 hours

Note 1: The Parties agree that the Commonwealth will not assign more than a 50% allocation of the Pool Percentage to any individual Service Level.

Note: 2: Contractor's failure to achieve any Service Level will not constitute a Service Level Default or accrue toward a Service Level Termination Event to the extent such failure is directly attributable to any of the following: (i) the failure of the Commonwealth to perform an obligation under the Contract, (ii) the failure or unavailability of Equipment or other resources for which the Commonwealth is operationally and managerially responsible pursuant to the Contract,

(iii) the actions of the Commonwealth, but excluding all such actions in the ordinary and proper course of the receipt and use of the Services, (iv) the Commonwealth's redirection of available Contractor resources, (v) changes made to the environment by the Commonwealth that were not communicated in accordance with the Change Control Procedure or other method agreed upon by the Parties, and (vi) Force Majeure events as (as defined in Paragraph 27(c)(2) of the Contract. The relief afforded pursuant to the preceding sentence shall apply (A) with respect to those failures identified in (i) and (ii) above, only to the extent that (1) such failure or unavailability was not caused by Contractor, its Subcontractors or any Contractor personnel, (2) Contractor's performance was dependent on such obligation or responsibility, and (3) such dependency was expressly set forth in Schedule B (Statement of Work) to the Contract and/or the Process and Procedures Manual; and (B) with respect to any of the matters referred to in (i) through (vi) above, only if Contractor uses commercially reasonable efforts to perform and meet the affected Service Level(s) despite such failure or unavailability, and notifies the Commonwealth within forty-eight (48) hours of the Contractor's knowledge of such failure, unavailability or other action, and describes the effect on Contractor's ability to meet the relevant Service Level and provides the Commonwealth with the opportunity to mitigate such effect.

Additional Definitions:

1. "Bronze" means all the Managed WAN Routers and LAN Switches for which Contractor provides Monitor and Notify Management, and for which the Customer provides a minimum of 24 x 7 parts and labor maintenance coverage with an 8 hour onsite response time with Contractor or a Contractor approved 3rd Party Maintenance provider. Managed WAN Router and Managed LAN Switch configuration back-up and restoration is not included.
2. "Customer Request Date" means the customer due date or CRDD in the Contractor's service management platform (SMP).
3. "Emergency Downtime" means downtime agreed by the Parties to enable maintenance and break fix (i) necessary to address Service issues stemming from Force Majeure causes or (ii) otherwise agreed by the Commonwealth pursuant to the Emergency provisions of the Change Control Procedures.
4. "Gold" means the Managed WAN Routers and LAN Switches for which Contractor provides Full Management with ETM, and for which the Customer provides a minimum of 24 x 7 parts and labor maintenance coverage with a 4 hour onsite response time with Contractor or a Contractor approved 3rd Party Maintenance provider. Managed WAN Router and Managed LAN Switch configuration back-up and restoration is included.
5. "Hold Time" or "Customer Time" is defined as a period of time when Contractor is prevented from progressing the investigation or repair of an incident (outage or degradation) due to Commonwealth required decisions or actions. Examples of this include, but are not limited to:
  - Not providing physical access to a facility pursuant to the Contract so that equipment can be tested or replaced
  - Not releasing a Service ID for testing
  - Not providing accurate or complete information when opening an incident resulting in a Contractor inability to progress the resolution of the logged incident
  - Not responding with necessary additional information upon request to enable the effective investigation or repair of a logged Service ID related incident
  - Commonwealth requested delays in the installation of required patches and/or upgrades
  - Failure of user authentication services, unique end-user VPN client software issues, or other components managed by the Commonwealth.

In every case in which Contractor intends to place an incident or ticket on Hold Time or Customer Time, Contractor will make the appropriate prior notification to the Commonwealth. Valid Hold Time and Customer Time is excluded as outage time in calculations of Service Level Availability and Time to Restore.

6. “Major Degradation of Service” means a Service that tests as fully operational but is degraded below user expectations across a significant segment of the user population as determined by the Commonwealth.
7. “Resolution” is defined as removing a fault or degradation from the Commonwealth operational environment. Resolution is followed by notification to the Commonwealth and either performing further joint testing or receiving an approval to place the affected Service or Service ID back in operation.
8. “Response” or “Respond” is defined as Contractor taking and logging meaningful action to progress the testing and restoration of any Service ID, or, as the case may be, Security Services, that has an active Incident ticket opened in the Incident Management System as defined by the Incident and Problem Management Process which is part of the Process and Procedures Manual.

Examples of meaningful response actions include the following, all pursuant to the Policies and Procedures Manual:

- Calling the Commonwealth to obtain additional information to help progress the testing and restoration of the logged incident
  - Requesting access to a facility
  - Requesting release of a Service ID for testing
  - Requesting contact information required to progress the incident management process
  - Escalating the incident to technical support for additional testing and analysis
9. “Scheduled Availability” means 24/7/365, unless otherwise specified in a Service Level, minus Scheduled Downtime, Customer Time, Hold Time, and Emergency Downtime.
  10. “Scheduled Downtime” means downtime expected and agreed by the Parties, expressed monthly, for which the underlying systems were taken off-line for routine or scheduled maintenance during the Measurement Window.
  11. “Service ID” means the unique identifier assigned to a circuit, CPE or service by Contractor.
  12. “Service Level Availability” shall mean the actual availability of access and all functionality of the Services described in a Service Level expressed as percentage of the Scheduled Availability for such Services.]
  13. “Service Level Commencement Date” means, for each Service Level, the first day of the month following the date that Contractor has transitioned the corresponding Services and commenced Charges for such Services.
  14. “Service Restoration Enterprise” is defined as measuring the effectiveness of the high availability design as implemented.

15. “Silver” means the Managed WAN Routers and LAN Switches for which Contractor provides Full Management, and for which the Customer provides a minimum of 24 x 7 parts and labor maintenance coverage with a 4 hour onsite response time with Contractor or a Contractor approved 3rd Party Maintenance provider. Managed WAN Router and Managed LAN Switch configuration back-up and restoration is included.
16. “Standard Service Interval” means the corresponding period of time in the Standard Service Intervals in the Policy and Procedures Manual, including procedures regarding accuracy, completeness and changes to previously accepted orders. As of the Execution Date, the Standard Service Intervals are set forth in the document provided by the Contractor to the Commonwealth labeled VzB Standard Service Intervals v1\_9\_25\_09.xls
17. For purposes of the Service Level Matrix, a “day” means a 24 hours period from the trigger for the measurement. For example, if a ticket is logged at 9:15am on Tuesday the 14th, a “day” ends at 9:15am on Wednesday day the 15<sup>th</sup>.