A P R O P O S A L T O

The Commonwealth of Pennsylvania

RFP# 6100004339

Telecommunications Managed Services
Technical BAFO Submittal

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1. ***The Verizon service level methodology and standard service levels are referenced but never explained in detail. Please provide detailed information regarding the service level methodology, at-risk-amount, service level credits, earn backs, proposed service level agreements by product and/or service, and timeframe when SLAs take effect.***

Verizon Response

After review, Verizon agrees to accept the SLA Methodology terms defined in the Telecom RFP - Schedule F.

Ref ID	Commonwealth Requirements	Comply (Y/N)	Offeror Response
1.29	The Offeror shall jointly develop with the Commonwealth Service Level Agreements (SLAs) that establish minimum performance requirements for services provided. The Offeror will meet the service levels in Schedule F-1.	Y	
1.594	The Offeror shall meet the Service Levels described in Schedule E-1.	Y	

2. ***Provide detailed information regarding the capabilities of the SMP system.***

Verizon Response

Based on our further understanding of the Commonwealth's use of the CTMS. Verizon has revised our solution to retain and support the CTMS for the life of the contract. The Commonwealth's existing CTMS data bases; including the inventory, the ISS catalog listings, service ordering, trouble ticketing, directory, cabling records, and CTAR integration will be preserved. The CTMS data bases will continue to be updated with all activity post award to Verizon..

Verizon's solution enables ebonding between the CTMS and our Service Management Platform (SMP). SMP is the interface to Verizon's back office systems. This design provides an enhanced solution which enables flow through provisioning for our proposed services. The transparent flow through automation of SMP to CMPT eliminates human error of manual records, speeds up processing time, provides a dependable and recurring experience with customer satisfaction.

This approach enables the Commonwealth to leverage a proven investment of CTMS with the strength of the ITIL based Verizon SMP platform. The Verizon SMP is a platform providing ITIL v3 based set of tools consolidating multiple Verizon back

end systems together. This integration expands CTMS's capabilities directly into the actual back end systems used to create and deliver the Commonwealth's service. This design will provide integration that extends the CTMS capabilities through the consolidation of six existing contracts into the new 2009 Telecommunications Contract.

The integration of CTMS and SMP provides the ability to provide third party vendor integration and management capabilities. This includes the ability to onboard a third party vendor for automated B2B eCommerce. Verizon leverages partner/supplier gateways to support the interchange of a wide range of industry standard messaging protocols with suppliers and partners. These protocols include CMIP, XML, Web services, EDI, secure FTP, secure Email, as well as web-based portal interactions.

3. ***Describe in detail how Verizon proposes transitioning from CTMS to the SMP system. This plan should address Verizon's approach, Commonwealth requirements as set out in the RFP, expected level of effort, and timeline.***

Verizon Response

Verizon's revised solution ebonds the Service Management Platform with CTMS. The ebonding interfaces will be initiated as soon as possible following contract award. Through ebonding, CTMS will remain the Commonwealth's front end system to Verizon Business products, services and systems. This revised solution protects the Commonwealth's investment in CTMS and utilizes proven ebonded interfaces to deliver a fully integrated solution.

No transition effort on the part of the Commonwealth is necessary as the CTMS system is ebonded to the Verizon SMP for tasks such as Order, Billing, Inventory, and Trouble Ticketing within 180 days after contract award.

Benefits of the CTMS system with the SMP back end.

Requirements	Solution	Benefits
Single system for ordering, billing, asset management, and reporting on all services	Utilize Commonwealth's CTMS system and build ebonds to Verizon's SMP platform	Maintain ease of use of current CTMS system, minimize end user re-training, take advantage of Verizon ITIL based SMP platform to support flow-through provisioning and enhanced change management
Online catalog of vendor provided products and services	Populate catalog of Verizon services within CTMS.	Provides smooth transition from current contract services to Verizon services through single interface for ordering and provisioning of services.
Highly available	Utilize current highly	Migration of CTMS platform

platform, accessible 24x7x365	available CTMS system until 2011, then migrate CTMS onto refreshed hardware/software platforms, located in dual data centers, managed by Verizon	onto newer, high performance / high availability hardware.

Once ebonded, CTMS becomes the front end system to the Verizon SMP platform with no custom portal developed by Verizon as previously indicated in the original proposal. Ebonding provides a bidirectional data path for information updates with CTMS remains the Commonwealth system that provides orders, inventory, billing, trouble ticketing, cable records and telephone directory functions.

IT Development by Verizon continues on SMP systems from contract award through the CTMS transition period. Development completes back office functionality that bundles services, billing features, and functionality for the Commonwealth as part of the RFP requirements. These features are available through SMP with CTMS as the front end. Catalog updates are provided, however any programming changes needed in CTMS may require a programming project to continue CTMS alignment with end user functionality.

Reporting on the CTMS platform continues to function in the usual manner. Commonwealth users login to CTMS and run reports on active and deactivated inventory within CTMS in the usual method.

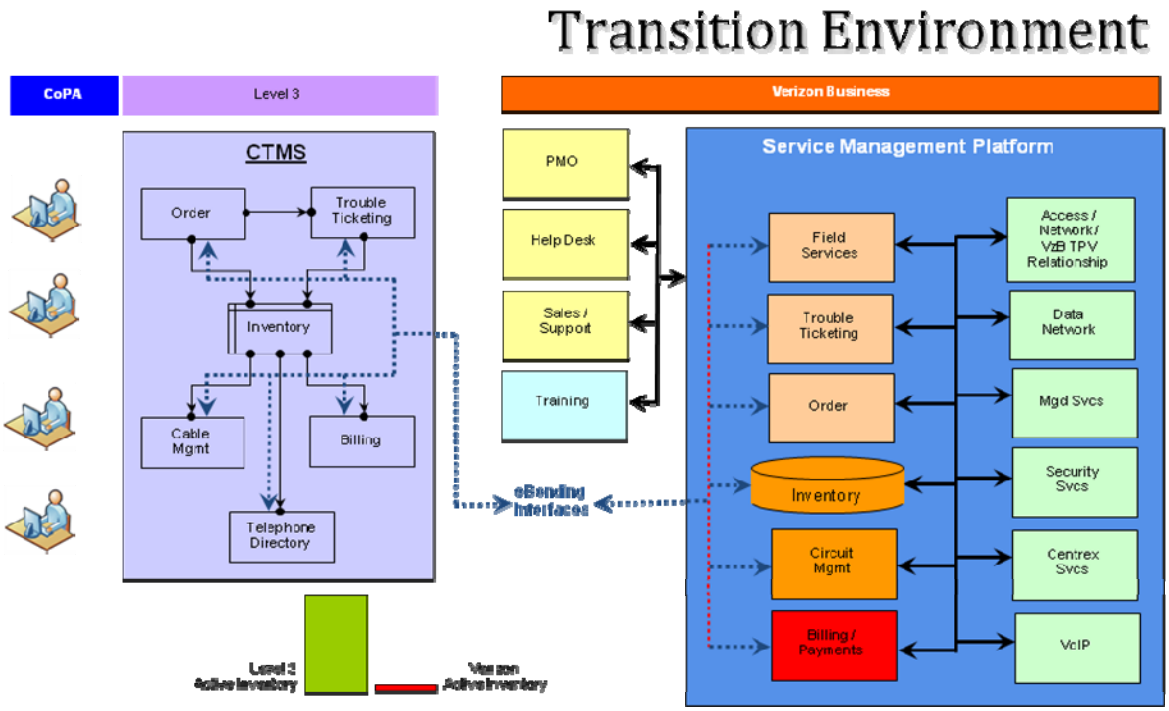
Redundant systems continue to allow 24x7x365 access to the platform and Verizon provide the management and support for these systems. Changes to the systems are coordinated with the Commonwealth by a U.S. based support team. CTMS continues to provide SAP data interchange format.

Ref ID	Commonwealth Requirements	Comply (Y/N)	Offeror Response
1.589	The Offeror shall coordinate in advance any CTMS program changes that are necessary according to a schedule provided by the Commonwealth.	Y	

Transition to Verizon Business environment will be to incorporate only the ebonding interfaces to CTMS. IT Development on the Verizon Business systems will have no impact to CTMS. As development continues on the Service Management Platform (SMP) toward the transformation target of 2/2011, Commonwealth users will not

experience any changes to CTMS. Verizon Business products and services will appear in the CTMS catalog and inventory.

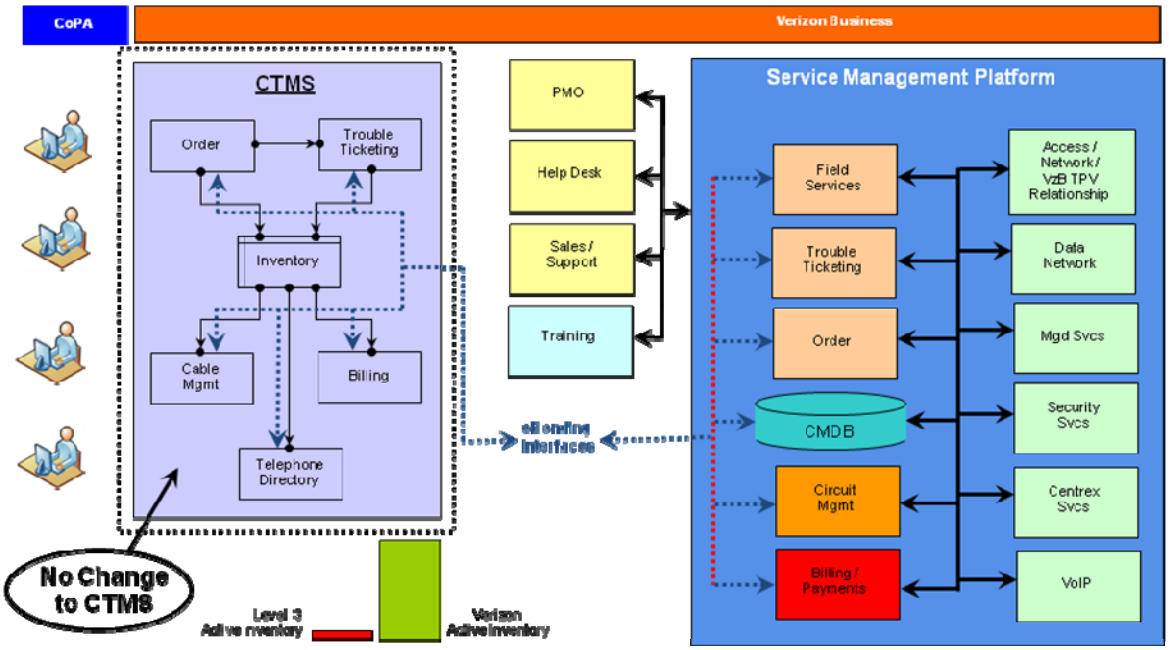
Throughout transition, Verizon Business products and services will be ordered and the CTMS inventory will increase. Commonwealth end users will continue to use CTMS with no changes to the system.



When transformation arrives, Verizon Business takes ownership of the CTMS platform. However, no change to Commonwealth user experience will take place. CTMS will continue to operate throughout the life of the contract. Ebonding interfaces implemented during transition period will continue to provide the integration of CTMS to Verizon Business systems.

While a CTMS hardware and software refresh is planned, no change to the environment is planned. A hardware and software refresh will improve the user experience through performance enhancements, but will not change the user environment. The investment the Commonwealth has made in CTMS will continue beyond the transformation date of 2/2011.

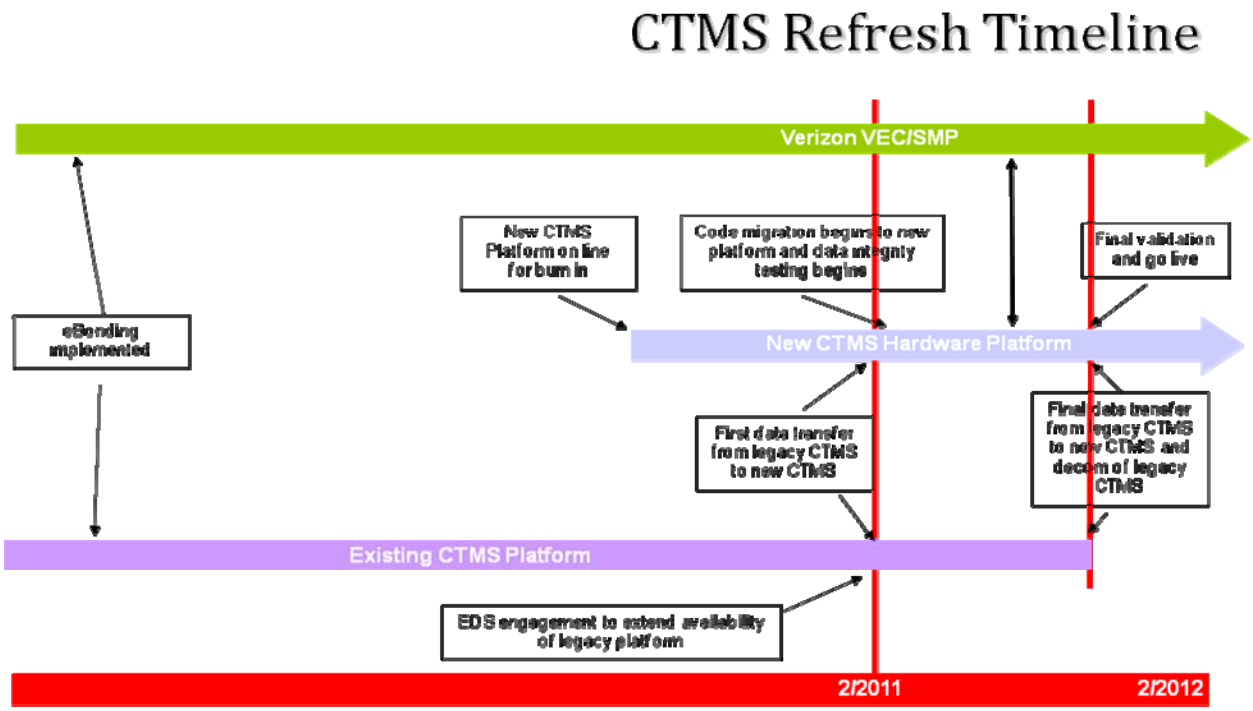
Transformation Environment



Approximately three months before the 2/2011 target transformation date for Verizon Business to take over responsibility of CTMS, a platform refresh project will be initiated. New hardware and software for the CTMS environment will be brought on line and prepared for the platform transfer.

A project will be initiated with EDS to maintain the current platform during the transition to the new platform. On the transition date, code and data will be transferred to begin the code and data validation. Once the new platform is tested and validated, a go live date will be coordinated with the Commonwealth. A maintenance window and final data transfer date will be scheduled with the Commonwealth.

The final data transfer will be executed and the new system will be brought on line. Legacy CTMS hardware will be taken off line and and the maintenance windows closed. The refreshed platform will go live and all Commonwealth users will login in to the new platform. Commonwealth users will experience only one maintenance window to bring the new redundant platform on line. New hardware and software will provide enhanced user experience through improved performance.



Order Entry

Orders are processed from start to finish in CTMS. SMP is the back end system that processes orders, billing, trouble tickets and other electronic requests from CTMS. A Commonwealth user that desires to order a service from the new contract, logs in to CTMS, select the service from the catalog, and place the order in the usual manner. SMP receives the order through the ebonded interface. The order from CTMS is validated and processed for service delivery. As the order flows through the various stages of service delivery, status of the order flows back through the ebonded interface to CTMS for status

To ensure services can be ordered from within CTMS, the Verizon product catalog is available from within CTMS. Updates to the catalog are provided through an ebonded interface with the Verizon SMP platform.

Reporting for the orders of services are available through the CTMS platform. In addition reporting for services can be obtained through the Program Management Office (PMO) governance, and account team. Ad hoc and standard query reporting continues on the CTMS platform.

Once the service delivery is complete, the order receives a complete status and CTMS receives the final status update.

Billing

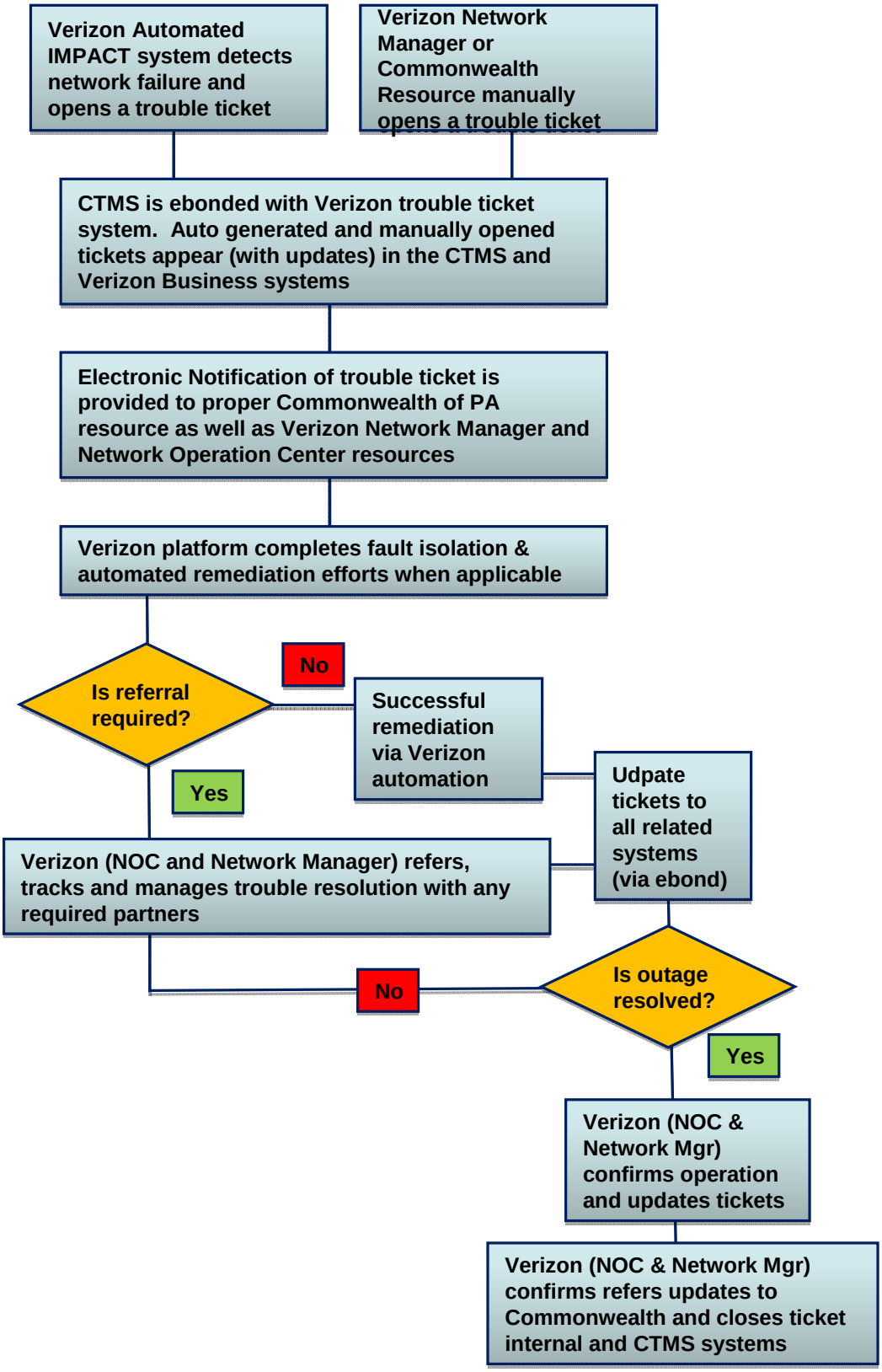
CTMS receives electronic billing through an ebonded interface from SMP. CTMS processes the billing based on current business processes and forward through to SAP, or other internal processes necessary to complete the internal billing steps. Payments for the billing are made to Verizon and payment updates are made to CTMS through the ebonded interfaces.

Trouble Tickets

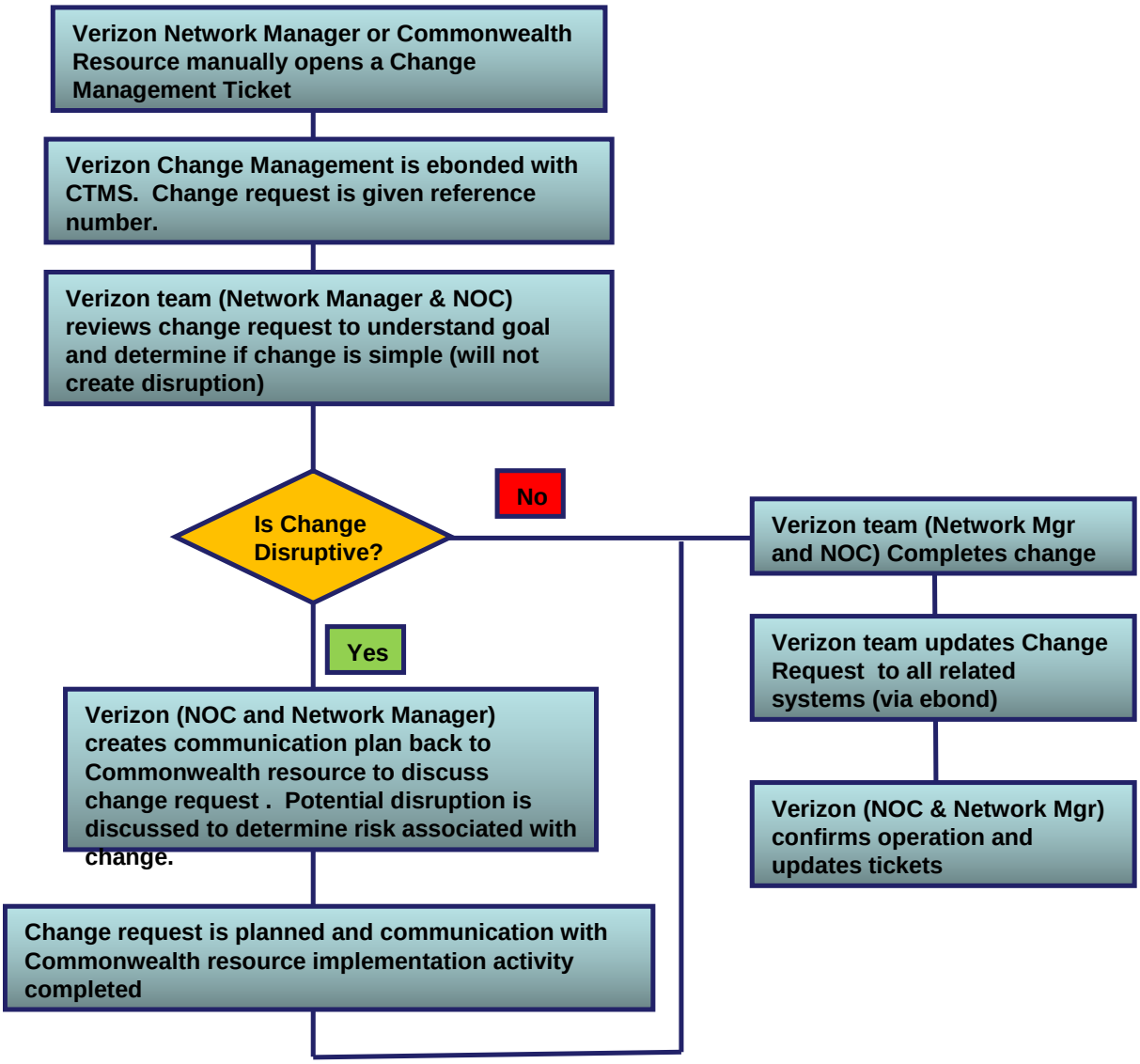
The trouble ticketing module of CTMS is ebonded with the trouble ticket system at Verizon. Auto generated and manually opened tickets appear in the CTMS system. Status updates appear in the CTMS system as well.

If a CTMS end user encounters a service error, a trouble ticket is opened in CTMS. The trouble ticket that the end user opened in CTMS is transmitted through an ebonded interface into the Verizon SMP system and a trouble ticket is generated. If an end user contacted the help desk and a trouble ticket was opened, the SMP system transmits the trouble ticket information back to CTMS to show that a trouble ticket was open for the Commonwealth. SMP also transmits system generated trouble tickets where our IMPACT management platform identifies trouble and auto generates a ticket. CTMS has trouble ticket information, status, and closure information through the ebonded interface.

Fault Management



Change Management



Asset Inventories

Inventories of assets that are in CTMS are updated through ebonding as well. Normal business processes or ordering equipment may provide inventory updates, but an ebonding interface to the asset inventory ensures the inventory is accurate at all times. As inventory information is updated in the Commonwealth inventory, electronic records are transmitted through the ebonded interface to provide an updated inventory.

The revised solution keeps the investment of CTMS current through the life of the contract. The level of effort for the Commonwealth is negligible as CTMS continues throughout the term of the new contract. The user interface for the Commonwealth does not change, nor do the day to day practices surrounding CTMS.

4. How will historical CTMS data be supported in SMP?

Verizon Response

In the revised solution, CTMS continues to provide all CTMS data and functionality. Historical CTMS data is supported in Verizon SMP by an inventory database with reporting and query capabilities.

Business continuity practices continue to protect the historical data to ensure that the historical data is available for reporting and auditing purposes. As the Verizon data becomes the prevalent services for the new contract, the deactivated inventory continues to be stored in the CTMS system assuring that current business processes continue to be in force throughout the life of the contract.

5. Describe Verizon's approach to co-managed network equipment for managed services and ability of agencies to monitor their networks.

Verizon Response

CO-MANAGED WAN, LAN and WLAN

Verizon offers multiple managed and co-managed solutions for the Commonwealth's agencies regarding router, switching, and wireless LAN infrastructure. The Commonwealth agencies choose varied subscription levels from no management on customer premise devices to fully managed devices with multiple levels of service (Gold, Silver, and Bronze). As part of Verizon's managed offerings, we provide a highly skilled and trained network manager. This individual is specifically assigned to

an agency allowing them to become very familiar with all the network intricacies. Verizon designed this network management solution to support the Commonwealth's goal of delivering a flexible service delivery model that combines both Commonwealth and provider capabilities

Co-Management is defined as shared access and privilege to managed devices. This means that Commonwealth agencies have certain access rights and privileges to network devices and tools in concert with Verizon.

Agency access rights and privileges are dependent on service levels as defined in the Commonwealth's RFP (Gold, Silver, and Bronze).

The minimum level of network management service is the Bronze service level which includes:

- Logical access control of network devices by Commonwealth IT personnel (Bronze service only)
- Proactive device monitoring leveraging IMPACT
- Proactive notification of network faults
- Web based portal access to view performance reports
- Access to shared network manager
  - Single point of contact and customer advocate
  - Consultative resource to assist the Commonwealth frame strategic direction, develop network design, and operational policy

The Silver level of service builds upon the Bronze by providing:

- Logical configuration change requests are made through the Network Manager or through web based portal requests.

The Gold level of service builds upon the Silver by providing:

- Enhanced Concord Reporting that includes quality of service (QoS) and up to 20 application reports leveraging Network Based Application Reporting (NBAR).
- Proactive Performance Management (PPM) - Identification of service degradation such as circuit errors, delay, jitter, etc.

Verizon recognizes that some Commonwealth agencies may utilize on premises network management tools and systems. Verizon can provide SNMP trap information directly into any agency infrastructure. This provides these agencies with a network fault view consistent with Verizon's operational view into network incidents.

Verizon's managed service architecture directly benefits the Commonwealth by creating efficiencies in the Commonwealth's operational environment which improves the Commonwealth's ability to deliver quality services to its constituents through:

- The delivery of a consistent statewide architecture that supports Voice, Video, and Data applications, and
- Application prioritization through QoS
- Central web based portal view into network performance, asset inventory, and ticket status
- Enhanced QoS capabilities (Gold Service level only)
- Network Manager support

CO-MANAGED Security

Verizon will provide an onsite certified security resource in Harrisburg that will support the Commonwealth during implementation and handle issues onsite for the life of the contract. This resource and Verizon's other experienced and qualified staff will work with the Commonwealth on co-managed services.

The two most common forms of co-managed service are:

- Full managed service (usually, SecureManage) by Verizon, with full access by both the agency and Verizon to the device
- Managed service without rulebase management by Verizon (usually, SecureWatch), with full access by the agency to the device

6. Provide more detail regarding Verizon's approach towards the transition of services. How will this be achieved? At a minimum this should describe how Verizon will work with OA/OIT, work with the agencies, and work to minimize service disruptions.

Verizon Response

Verizon Transition Methodology

Verizon's Program Management key personnel (Contract Project Manager and Transition Manager) will be collocated in Harrisburg and will interact daily with key OA/OIT personnel. Agency assigned Verizon Network Managers and Account team members will handle direct communications to the agencies with PMO oversight and direction being provided by the Harrisburg PMO team.

The current Verizon Sales, Operations, and Service management team, located in Harrisburg, Pennsylvania and dedicated to the Commonwealth, will play a key role in the successful transition process. The nine (9) Network Managers who currently support the agencies' data networks will be integrated with the transition team and the agencies to make sure the agencies' unique requirements are understood.

Verizon's network managers' first-hand knowledge of the agencies' network configurations will aid in the Commonwealth's controlled transition to the Verizon network.

The Sales team, comprised of the four (4) relationship agency account managers and the five (5) technical sales engineers (the Service Area Leads for Service Areas 2 and 3), will assist the transition team in providing an understanding of the agencies' business needs. This team will also assist the Commonwealth agencies in understanding the capabilities of this solution and in ensuring full utilization of the features.

The existing Service Managers supporting the Commonwealth will also continue their support on the account providing insight on the unique service requirements of the Commonwealth agencies. These resources, with their background knowledge of the Commonwealth's requirements and needs, will provide a faster refinement of the transition plan and will eliminate disruptions to the Commonwealth's business.

The Verizon response, for example keeping CTMS in place for the term, is designed to minimize service disruptions. Due diligence will validate the completeness and accuracy of information, the validity of assumptions and confirm that the Verizon proposed design fulfills all Commonwealth requirements. Transition planning meetings will be held with OA/OIT and the agencies to determine specific priorities, maintenance windows and communications and governance plan requirements. In addition, all key stakeholders will be identified and engaged at this time and roles and responsibilities will be finalized and agreed. Risk analysis for each installation and required mitigation plans will be a routine part of the implementation planning process and OA/OIT and Agency Specific Business Continuity plans will be developed to integrate a full understanding of OA/OIT and agency business requirements, priorities and concerns. Following this process will help to mitigate and minimize service disruptions to the Commonwealth and its constituency.

All of these initiatives will be tracked by the PMO through the Communications Plan, Governance, and Project Management. Using the RACI (Responsible, Accountable, Contributor or Informed) model all involved and interested participants will be kept apprised of planning, scheduling, results and lessons learned. The Program Management team will utilize the ITIL V3 methodology to provide the discipline that ensures adherence to the processes that will minimize risk, emphasize transparency to the end user, and provide a feedback loop for continuous improvement. Additional detail is included in subsequent paragraphs that provide further detail of Verizon's transition methodology.

Final Award

Upon final award, Verizon authorizes the assigned Transition Team to begin preparation for contract signature and Day 1 activities. This preparation includes preparing draft document formats, identifying Verizon and Verizon partner key points of contact for planning, preparing a due diligence plan and reviewing information that is already in-hand. Complete and accurate order entry information is a key to transition and transformation timeliness and an assessment of information quality

and availability should be made during this period of time. In parallel, Verizon starts recruiting for staff positions that are required to support the Commonwealth through the life of the contract. Positions include Verizon staff as well as partner staff positions. Verizon presents key positions to the Commonwealth before making any firm offers.

Contract Signature/Day 1

Upon contract signature the Day 1 Transition Team engages the Commonwealth key POC's and set up the official kick-off meeting to begin due diligence and to establish early engagement communications and governance plans. The transition team develops the Contract Deliverables Document and begins set up work on the Workplace portal. When the Contract Deliverables Document is complete it is posted to the portal with accountability for all deliverables being identified using the RACI model. In addition, Verizon starts making firm offers to those staff candidates where the recruitment and review process has been completed.

The program kick-off meeting is held with The Commonwealth primary contacts. This is designed to ensure team awareness of the following key areas:

- The Scope and Objectives of the Program
- Governance Structure
- Team Roles and Responsibilities
- The Key Processes and Procedures
- Interfaces and Contacts
- The Overall Plans and Schedules
- Interdependencies
- Timescales
- Overall Deliverables
- Risk and Issue Identification
- Methodology and Standards
- Quality Procedures
- Reporting Requirements
- Staging and Installation procedures
- Escalation Lists and Process

Due Diligence

Due diligence is an early part of transition and is utilized to validate assumptions made during negotiations and to gather final technical and tactical detail that contributes to design, scope and schedule modifications if and where necessary. It is also the period of time when order entry data, site level documentation, escalation lists and vendor contacts are identified. All OA/OIT, Agency, vendor and partner contacts and points of escalation are also captured during this review. Information gaps that are identified get recorded and escalated for immediate resolution. We specifically meet with larger Agency SMEs to validate our assumptions in the areas of WAN (Data Network) and Voice Network Design. Additionally, we meet with other Agency SMEs to gather data as required. The due diligence process takes

approximately 2-3 weeks, requiring a cumulative 20 hours of the Commonwealth staff time per week.

Vendor contracts are examined and all contributing POC's are identified. Required "Letters of Agency" are prepared and readied for signature. Baseline performance is measured and recorded where possible and current processes and procedures are identified and documented.

The due diligence process permits gathered data refinement, knowledge transfer and risk mitigation by confirming or altering assumptions after conversations with the subject matter experts. The key objectives for due diligence:

- The Commonwealth and Verizon kick-off and discussion sessions to confirm, clarify or modify Verizon assumptions and project plans prior to the start of the program
- Review, modify and confirm details of the Transition Plan and supporting schedules to cover all the transition activities.
- Creation and Deployment of the Communications Plan
- Implementation of Program Governance and Reporting
- Confirmation of Acceptance Criteria to be used for the acceptance on a per-site/per-service basis.
- Information Gathering and Exchange (TPVs & Carrier)
  - TPV & Carrier Communications Plan Development
  - Clarification of roles and responsibilities
  - Plan for letters of agency (as required)

Upon conclusion of due diligence the transition and transformation project plan is finalized. The project plan contains details of the activities and timetable associated with transition and transformation. Verizon uses PMI methodology for all project planning and manages all projects in accordance with PMI principles. The Project Plan is assessed and reviewed by a joint team from the Commonwealth and Verizon during the transition period in order that input can be taken from all the appropriate stakeholders with the objective of ensuring the success of the program.

Transition Execution

Transition is essentially the process of integrating processes, teams, communications and management. When transition includes the introduction of new services and technologies as it does with the Commonwealth of Pennsylvania a PMI institute Project Management Professional is assigned by Verizon to manage the overall transition to all critical milestones. The PMP certified Project Manager kicks off the project when the design and deliverables have been finalized and host recurring virtual meetings until transition and transformation are complete. The keys to starting a transition in a timely manner and keeping it on schedule is utilizing

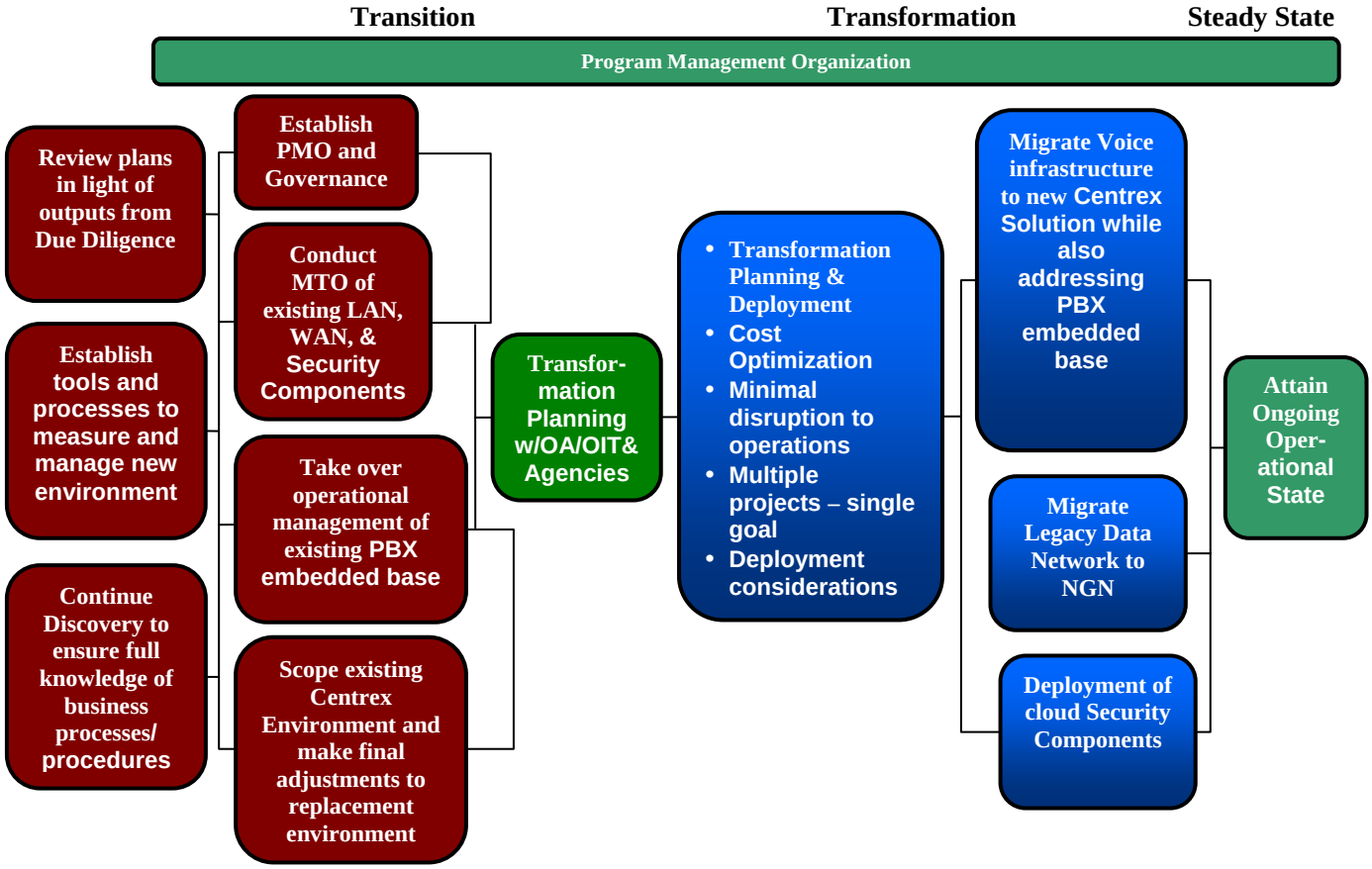
complete and accurate information and dealing with order/process exceptions aggressively. This data and process preparation is evaluated and prioritized during the due diligence process as mentioned above.

To effectively manage Transition and Transformation activities the Transition and Transformation plan provided in the RFP is updated with information gathered during Due Diligence and discussions with SMEs and other Commonwealth resources. The transition plan effectively is a work in process requiring initial collaboration between the Commonwealth and Verizon project teams on commencement of the contract. Once refined and implemented, however, the plan is executed primarily by specialized Verizon teams executing Commonwealth preapproved tested scripts and site schedules. Commonwealth technical and business managers receive ongoing conversion status reports and performance reports. Incident reports and issues resolutions follow a Commonwealth approved process and escalation cycle.

The action items (tasks) presented in the project represents a summary of the actual work to be performed. The details of the activities, processes, and timelines are amended following due diligence sessions with Commonwealth SME's. The essential elements of the overall program do not change unless significant scope changes are made. Verizon assumes that the Transition Period commences upon Contract Signature and lasts approximately 20 months. This is subject to change depending on the date of contract execution and any other variables unknown at this time. Nevertheless, Verizon is committed to execute the Transition Plan within the proscribed timetable as Verizon has the experience and resources to fulfill the Commonwealth's business objectives.

Included in the Project Schedule is a test phase for each major to discrete program element. The Test Phase is designed to allow an assessment of the success of the activity and to provide lessons learned and thus refine the success criteria and contingency planning to refine the plan and ensure a successful program. Each Test Phase assessment is held in conjunction with the relevant stakeholders and the results and subsequent actions communicated to the wider team via Program Governance. There is a continuous process of review and refinement for all the project plans throughout the Transition Program as further detail is gathered and the delivery environment becomes well understood

Transition & Transformation Methodology



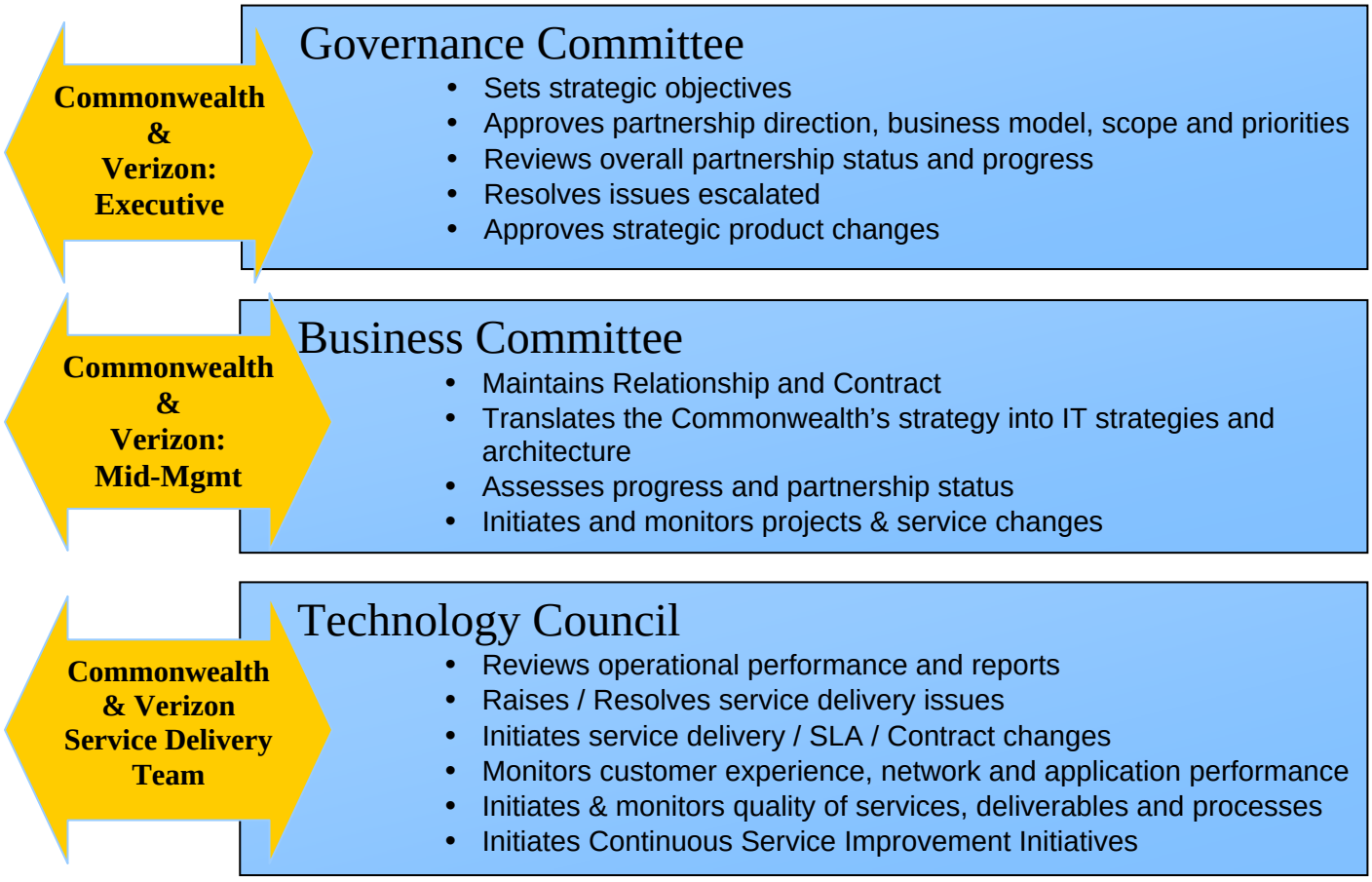
Governance

Verizon utilizes a multi-level Governance program. The Technology Council is the tactical governance level and meets most frequently. This governance committee is focused on day to day operations and planning and meet weekly at a minimum. In the early stages of transition, more frequent meetings help to keep the transition on track and address any issues with transition rollout and risk avoidance. Through the Governance process and in conjunction with vendor and change management policies, Verizon manages risks with current suppliers and current and future Third Party Vendors.

The Business Committee is a mid-management governance level and is focused on tactical effectiveness, curing any systemic issues that arise during the engagement and planning for additional requirements that might impact design, workload, team interaction or financials. This team meets monthly at a minimum.

The Governance Committee is the executive level governance team and is focused almost exclusively on strategic items. This committee ensures that executive relationships are delivering the required results; that the Commonwealth expectations are being met, and that organization and business developments that may have an impact on the Commonwealth-Verizon relationship are being communicated and leveraged when possible. This committee meets no less than once yearly. In each of the levels of Governance, participants are identified and confirmed from all pertinent contributing and participating organizations (OA/OIT, Agencies, Verizon, Vendors, and Sub-Contractors) and agendas are developed, schedules are set and meeting objectives and material formats are developed and agreed.

Governance Model for the Commonwealth



Communications Plan

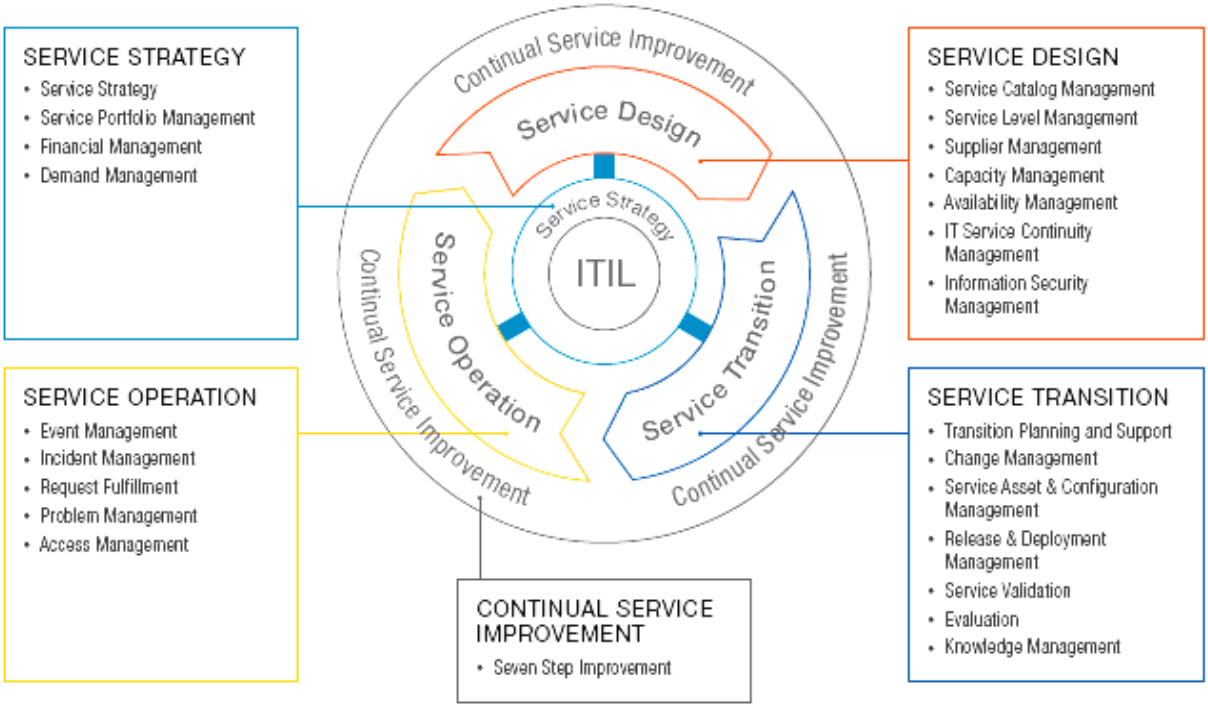
Verizon believes that the development of close working relationships with the Commonwealth is pivotal to the success of the overall program. As we move through the integration of Verizon PMO staff with the Commonwealth for the transition of

management responsibility from the current providers to Verizon the communication plan is a cornerstone of the program. The communications plan is a master list of all required meetings, participants, reporting, schedules, objectives and tracking methodologies. In addition, risk and change management review boards are identified during the creation of the plan and business continuity priorities are recorded. A systematic continuous improvement initiative is memorialized with finite commitments and the plan is formalized, approved and up-loaded to the workplace portal for documentation control.

Permanent Staffing

As soon as the permanent staff members are on-board the Transition Team begins to affect shared responsibility and accountability via a controlled integration of these resources. Verizon's target is to have all staff candidates identified and on-board within 60 days of contract signature. At the point when the PMO team is on-board the ITIL methodologies are implemented for change management, financial management, incident management, problem management, asset management, release management, capacity management and performance management. Integration of the Commonwealth processes into this methodology is designed, communicated and agreed and an environment of standard interactions with continuous service improvement in institutionalized across the Commonwealth and it Agencies.

ITIL v3: The Model for Service Delivery



The finalized Process and Procedures manual is posted to the Workplace portal where access and version control are managed. Permanent staff on-boarding is a high priority as it delivers the resources needed to ensure transition and transformation timeliness. The Permanent Staff include:

Contract Project Manager: (1)

- Overall Governance and oversight and management of the transition and implementation of the service delivery of the products, services, program solution and resources.
- Facilitate Governance committees
- Customer relationship; single point of contact
- Oversee and management of Customer Satisfaction Program: end users surveys (PC Networks to propose)
- Matrix manage all supporting groups, organizations, personnel, and TPVs

Transition Managers: (2 – 1 voice, 1 data both for 2 years – 1 to become Incident Manager Year 3-7)

- One Transition Manager remains in PMO for life of contract
- PMI certified project management professional will be dedicated part of transition team
- Oversight and Leadership over 18-20 month transitions to Verizon
- Monitor and integrate current the Commonwealth TPV contracts into Transition Plan
- Coordinate, manage and integrate TPV partners into Transition Plan
- Matrix manage implementation teams across products and services

Service Delivery Manager: (1 Transition PM becomes Problem Manager for years 3-7)

- Assumes day to day oversight and management from General Manager.
- Escalation oversight and back up support for General Manager.
- Oversight of day to day Program from a technical and operations perspective
- Coordinate integration across all program solution products and services
- SLA review, compliance, and management
- Program technical and operational escalations management and resolution, working with help desk and NOCs
- Facilitate Chronic issue management and resolution
- Address operational and delivery issues and adherence to performance targets and contract compliance

TPV Analyst: (1)

- Administration and Management of TPV partner contracts supporting the Verizon solution. (approx 5, including PC Networks, Black Box, Payphone and Key systems vendors)
    - Organize and supervise any TPV DD activity
    - Ensure TPV fulfillment commitments

- Recommend resolution for vendor service issues
- Assist TPV issues for implementation/transition support
- SLA exemption research and documentation for TPV
- Drive trouble ticket resolution for TPV service problems
- Intervene with TPV mgmt to escalate service failures
- Review TPV monthly reports on service
- Review and approve TPV invoices for payment
- Resolve any billing issues

Finance Manager: (2)

- Manual billing process support for one single invoice to the Commonwealth
- TPV billing reconciliation and analysis

Service Level Reporting Analyst (1):

- Prepare and package mutually agreed to Data, Voice and SLA reports
- Maintain Operations Manual
- Governance performance reporting

Change Manager (1) and Change Analyst (1):

- Oversight and overall coordination of standard change management process across products and services, and across the approximately 32 agencies. Anticipating an annual 5-10% MAC activity level.
- Assist with problems, issues and escalations
- Root cause analysis and resolution
- Change Management future strategy and planning
- Chronic issue management support

Network Managers: (9)

- Provide Single Point of Contact for each Agency assigned
- Provide Governance Support for each Agency assigned
- Provide Agency Vendor Management Interface
- Provide Agency Network and Solutions Integrity
- Single Point of Contact for Agency Change Management
- Escalation Support
- Implementation Management
- Provide Incident & Problem Management Support and Root Cause Analysis when appropriate
- Release Management
- Provide Performance Management in the form of Agency Specific analysis and Business Continuity Planning

Help Desk

The Help Desk staff is hired shortly after contract signature. Scripts are developed, staff is trained, and Help Desk functionality and reporting is tested and evaluated early in the engagement process. A communications plan is created to advise the Commonwealth end users of Help Desk availability and feedback and monitoring ensures the service is meeting the Commonwealth expectations.

Project Management

In-Flight and new projects that are outside of transition and transformation are managed by either additional PMP certified project managers or by existing PMO staff. The PMO identifies a "Project Master" who is accountable for reviewing projects of this nature and ensuring the necessary resources are assigned to facilitate project success.

Steady State Management

Your PMO Program Manager is your single point of contact for solution performance and all service delivery and operational issues. Utilizing the ITIL methodology, solution site specific technical details are documented during installation and all changes to the solution environment are managed through a tightly controlled change management process. Continuous service improvement is a part of our solution and is targeted and tracked throughout the contract life cycle. All improvements are communicated through governance and documented thoroughly. Steady state operation begins when the first site or process is integrated and continues throughout the contractual relationship. A business oriented approach is utilized to identify priorities, minimize risk, develop contingencies and evaluate solution success.

7. ***On page 50 of Verizon's response there is a reference to a 5% reduction in overall costs. Without including costs in the technical response, describe in detail how this will be achieved.***

Verizon Response

Verizon is now projecting a reduction of ***over 15%*** in overall costs to the Commonwealth. This will be achieved by using a variety of advanced technology and process improvements to lower costs, including:

Extensively deployed broadband infrastructure and resources throughout the commonwealth

Deployment of a converged network architecture based on MPLS

Universal rates throughout the Commonwealth

Voice services – Lowered costs for Centrex and migration to VoIP

Next generation Data network that allows significant consolidation of data services

Continued use of COPANET for access consolidation and scalability

The PMO as the Single Point of Accountability drives a unified focus on cost reduction and efficiency

Verizon's financial strength and stability allows us to continually invest in next generation technologies in Pennsylvania to lower costs. Examples of this investment include, ubiquitous deployment of Ethernet throughout the Commonwealth, 4G wireless broadband deployment, Fiber to the premise deployment (FiOS) throughout Pennsylvania.

The underlying technology supporting convergence to next-generation services is Verizon's ubiquitous MPLS network which lays the foundation for the overlay of other advanced technologies to lower costs. By leveraging Verizon's redundant, reliable data and voice network design, the Commonwealth specifically benefits from Verizon's solution in the following areas:

Voice Services

Verizon's voice solution provides the agencies with a method of evolving from a familiar trusted proven environment to their choice of the Next Generation solution set that matches their requirements. This enables the agencies to choose the technology they need when they need it. As the Commonwealth migrates to Next Generation solutions – like VOIP – the MPLS foundation provides the supporting infrastructure – eliminating additional costs.

Centrex is a managed, network-hosted communications service which, as part of the Verizon network, allows the Commonwealth to outsource all the network maintenance and technology upgrades to Verizon while receiving all of the benefits of a world-class network. The Commonwealth benefits from a very attractive financial solution. Verizon's Centrex solution includes flat rate local usage, abbreviated dialing with advanced intelligent network capability. This service offers functionality enabling the Commonwealth to be in control of desired changes, providing you with more efficiency in managing your Centrex, if you so desire. Centrex provides the Commonwealth the feature-rich service specified in the RFP, laying the foundation to prepare to meet future business needs today, and the ability/option to migrate to an integrated voice and data network for greater network flexibility and cost savings when the Commonwealth chooses to migrate.

- Enhanced voice technology capabilities that allows for a more attractive rate – by treating all calls originating from a Centrex line/PRIs as local/dedicated origination, thus eliminating the additional costs associated with switched calls
- Attractive pricing for MACs
- Verizon's voice mail solution migrates from the current technology solution to the next evolution
- Use of Verizon's Advanced 800 Service technology affords additional cost reduction

Hosted IP Centrex

Verizon's Voice over IP (VoIP) service offering extends compelling cost savings over the duration of the Commonwealth contract by bundling multiple rate elements into a single concurrent call.

A concurrent call is defined as a 'calling element' in the VoIP environment that enables a call path for an end user.

The bundled elements contained within a single concurrent call are:

- Unlimited local calling (in Verizon VoIP rate center)
- Tiered bundled LD minutes of use (in Verizon VoIP rate center)
- IP feature set
- DID block
- Network equipment, port and QoS

By bundling all of the rate elements into a single call path, Verizon can extend a significant return on investment as traditional services are phased out and new technology is phased in. The reason the return on investment can be significant lies in the fact that Verizon leverages the transition to a transformational Verizon network that reduces the Commonwealth requirements for traditional TDM based loop and access connectivity.

Including a bundled rate element encompassing local and long distance usage, Verizon can eliminate the Commonwealth's metered long distance charges on a per user, per agency basis.

This not only provides significant cost benefit to the Commonwealth, but also simplifies the Commonwealth's billing environment where the Commonwealth constituents receive a single invoice for dial tone, features, local and LD usage.

Data Networking

Verizon's circuit consolidation effort throughout the Commonwealth as well as through COPANET plays a role in the reduction in overall costs. Utilizing the technologies mentioned throughout our response, including our MPLS Based Private IP network and the Virtual Route Forwarding (VRF) Lite capabilities inherent in the Commonwealth's existing routers, Verizon is able to create a single secure converged network eliminating access circuit costs, hardware costs and maintenance and management fees.

In addition, Verizon's Ethernet access to Private IP offers improved business communications and at the same time offers simplicity, flexibility and reduced capital and operating expenses. Ethernet's bandwidth granularity, along with the Quality of Service capabilities inherent in both the Private IP network as well as the Commonwealth's existing CPE, allow the Commonwealth to more efficiently manage network resources and procure only the bandwidth required to meet application needs.

Verizon provides Ethernet upgrades promptly, on-line and in granular increments so that the Commonwealth is not forced to over-provide 'just in case' bandwidth to a location. The Commonwealth only pays for what is needed and can add or reduce capacity as needs change 'just in time'.

Verizon's Ethernet access uses the same protocol, frame format, and frame size as familiar LAN Ethernet, so the equipment and technology is simple, minimizing training costs. Ethernet being common to all sites means that they can be linked via a low cost Layer2/3 LAN switch without the addition of expensive routers or ATM access devices and the maintenance and management fees that go along with those devices.

COPANET

In addition to the circuit consolidation through COPANET, other areas of potential cost savings within the COPANET infrastructure lie primarily in the areas of increased operational efficiencies and improved service management brought about by new technologies and evolving standards which have the ability to automate many aspects of operations management. The bandwidth scalability provided by the COPANET is also an area of potential savings for the Commonwealth. As bandwidth requirements grow, the COPANET could be provisioned to provide the access services for that bandwidth, significantly reducing the requirement to add facilities to the COPANET locations.

Internet

In the current environment the Commonwealth is limited in the flexibility, diversity and redundancy of its Internet due to several factors such as size of Internet connections, Internet Providers and location of equipment. In keeping with the

requirements of the RFP, Verizon is proposing a flexible, diverse, and completely redundant Internet solution that carries the Commonwealth well into the future.

Verizon's Internet solution allows the Commonwealth to have "bandwidth on demand" that can instantly increase to support the Commonwealth's demand while only paying for the amount of bandwidth that is used thus saving the Commonwealth from paying for unused bandwidth.

Verizon's geographically diverse, fully redundant Internet solution also provides operating cost savings for the Commonwealth by providing a reliable solution that allows the Commonwealth to perform daily functions without loss of time or productivity due to Internet outages

Managed Security

Verizon negotiated discounts that are above and beyond the norms with the hardware vendors that are listed, and those savings have been passed on to the Commonwealth. As stipulated in the Terms and Conditions of this bid, all renewals were required to be priced at a period of seven years. None of the vendors listed offered renewal terms that exceeds five years, but Verizon negotiated seven year terms with Juniper, BlueCoat, and WebRoot. The Commonwealth is the only customer that is receiving these renewal terms with the stated vendors (*as of 1/19/09). Verizon provided additional discounts as part of this bid.

Managed Network Services

Verizon has reduced our current managed services rate as part of this bid. The Commonwealth has the benefit of Verizon's proven experience with managing enterprise networks similar to the agencies that comprise the Commonwealth of Pennsylvania to enable economic benefits. Verizon currently manages WAN, LAN, Wireless LAN, and IP enabled PBX devices from a single integrated platform. This platform, IMPACT, has been designed to leverage feeds from Verizon's managed and maintained devices that comprise network services (access and backbone network devices) as well as Customer Premise Equipment. This integrated solution allows Verizon to quickly isolate any network related fault and quickly identify the root cause to begin resolution efforts. The end result to the Commonwealth of Pennsylvania is a network which is more available and reliable. This allows the Commonwealth Agencies to serve the states constituents with a more reliable network that is operationally stable.

Program Management

The Verizon Program Management Office (PMO) drives the governance of the Solution and Services through accountability, measurement and service management. The Verizon PMO acts as the "customer advocate", managing the service delivery of the solution with the Commonwealth's best interest in mind, as the primary liaison between Verizon and the Commonwealth. The Verizon PMO manages overall service/performance within Verizon and its partners, manage

overall process improvements, manage overall financial accountability, SLA achievement, and the Commonwealth satisfaction.

The Verizon Program Management Office (PMO) is the single point of contact with accountability with responsibility for contract compliance, a strategic partner for long-term planning, and driver of the unified solution and service delivery.

The Verizon PMO manages all moves, adds, and changes to your existing vendors through Letter of Agency authorization thus freeing up the current resources you now have performing that function. In addition, the PMO manages the vendor billing dispute process and manage all vendors to their contractual commitments. With fewer vendors to manage and PMO managing billing disputes and MACD's the commonwealth can save significant expenses. PMO and the Network Engineering and Network Analysis team also looks for ways to right-size your network once it is installed and there may be savings in this area as well. Recommendations, such as utilizing WAN acceleration can also affect cost savings once the network is installed and application level performance is properly determined

8.a. Describe how Verizon will integrate into the Commonwealth's Security Incident Reporting Process.

Verizon Response

As stated in the Commonwealth's Information Technology Bulletin (ITB) Sec024 Verizon fully understands that proper reporting and management of cyber security incidents is critical in order to secure and protect the Commonwealth of Pennsylvania's critical IT business processes and assets from cyber-crime or cyber-terrorism. Verizon has several Commonwealth agencies under 24/7 monitoring and management today giving us the experience of using the Commonwealth enterprise-required escalation procedures needed to integrate into the Commonwealth's security incident reporting process.

In our proposed solution, Verizon provides for 24/7 Monitoring and Management of the Enterprise Security Devices located at the two Internet Gateways as well as services for individual agencies. Security events are generated in large numbers by security devices and not all of these events represent "security incidents." A security incident occurs when the managed services operations center, through analysis and correlation based on industry processes and consultation with the Commonwealth, determines that one or more events represent a possible security incident.

All security incidents are logged and reported within the managed security portal. Security incidents will also be escalated according to specific Commonwealth policies and procedures including the Commonwealth's Security Incident Reporting Process. In addition, we have added a dedicated certified security resource in Harrisburg that will interface with the Verizon SOC, the assigned Commonwealth technical POCs, and the Verizon PMO to assist in reporting and responding to security incidents.

The following describes the relationship between security events, incidents, and customer policies and procedures.

All event alerts generated by these devices are sent to the Verizon Security Operations Center (SOC) for analysis and correlation. The Verizon SOC provides highly flexible escalation and notification mechanisms to meet agency and the Commonwealth enterprise incident response requirements.

Any incidents deemed harmful by the SOC are escalated in the manner that is defined by the agency/the Commonwealth enterprise-required escalation procedures agreed upon by the agency, the Commonwealth, and Verizon to the designated the Commonwealth Security points of contact (POC), Verizon dedicated security resource, and the Verizon PMO.

These the Commonwealth POCs are provided all available information on the security incident to assist the the Commonwealth POCs in classifying and describing the incident as required by OPD SEC024A and OPD SEC024B.

The PMO performance manager along with the agency assigned network managers escalate on the Commonwealth's behalf when necessary and communicate with Commonwealth POC's as required in any extenuating circumstances. They also obtain "Root Cause Analysis" and provide Monthly, Quarterly and Annual reporting through the jointly developed Governance process and communication plan.

8.b. Using Selinsgrove as an example, how would the provisioning of high-bandwidth services be addressed for areas outside of Harrisburg, Philadelphia, and Pittsburgh?

Verizon Response

Verizon has revisited our proposal and is now able to provide universal rates for all services throughout the Commonwealth, therefore Verizon's approach to provisioning high bandwidth services does not vary dependent on location.

Ref ID	Commonwealth Requirements	Comply (Y/N)	Offeror Response
1.24	The Offeror shall provide the Commonwealth with a universal rate structure which charges the same rates for the same services statewide, regardless of serving distance, and/or geographical area.	Y	

Whether the service is in Selinsgrove, Philadelphia, Pittsburgh, Harrisburg, or any other location throughout the Commonwealth, Verizon utilizes the same procedure to determine bandwidth requirements, verify capacity, confirm facility availability, and communicate any unusual installation factors to the Commonwealth.

Verizon utilizes a number of advanced technologies for high speed access, dependent on the requirements. These access technologies include but are not limited to, Building Ethernet Aggregator System (BEAS) equipment, Next-Generation Add/Drop Multiplexers (NGADM) and a fiber based service called Ethernet LAN (E-LAN) service. Each of these access technologies interconnect with Verizon's coverage. Whatever access technology is used, Verizon's Converged Packet Architecture (CPA) is utilized to provide a scalable, reliable, and secure Ethernet-switching infrastructure to deliver Ethernet services to the Private IP cloud. The scalability and reliability of CPA allows Verizon to readily offer Ethernet Services throughout Pennsylvania.

In addition to the technologies available today, Verizon is continually investing in advanced technologies to evolve its high bandwidth solutions. We are deploying these advanced technologies in market areas with strong market support for Verizon. Technologies such as Verizon's cellular EVDO wireless data service and Verizon's FiOS fiber to the premise service are two solutions that provide the ability to expand Verizon's capabilities for high bandwidth services throughout the Commonwealth. These services represent the types of significant investments Verizon is making to expand its network capabilities. These technologies are available to expand Verizon's reach into the more rural areas.

Verizon's EVDO solution allows the Commonwealth of PA to leverage cellular access as a backup technology for main locations as well as a remote access solution for mobility. Current speeds provided by EVDO access can scale to 600-1400 Kbps downstream and 500-800 Kbps upstream, with 4th generation Long Term Evolution (LTE) technology described in our SOW response 1.147 promising speeds up to 100Mbps downstream and 50Mbps upstream. Verizon views Pennsylvania as a very important state for mobile broadband services and is committed to deploying and expanding mobile broadband beyond the current areas and into more rural parts of the state.

Because many network designs are optimized for disaster recovery, an alternative network access beyond a physical copper connection to the network is a desirable back up solution. Verizon leverages cellular EVDO as an alternative last mile access to the main MPLS backbone (Private IP) and provides fully managed network services to support this network design.

Verizon's ever expanding FiOS footprint also offers potential for future high bandwidth solutions. FiOS is Verizon's state-of-the-art fiber network that utilizes cutting-edge technology to provide converged communications at extremely scalable speeds. The FiOS technology allows voice, video, and data to travel over three wavelengths in the infrared spectrum. To serve a location, a single-mode optical fiber extends from an optical line terminal (OLT) at a FiOS central office or head end out to the an optical splitter that fans out the same signal on up to 32 fibers – thus

serving up to 32 locations within and area. At the location, an optical network terminal (ONT) transfers data onto the corresponding copper wiring for phone, video and Internet access. One of the three wavelength bands is devoted to carrying television channels that are compatible with Cable television products. The other two wavelengths are devoted to all other data, one for outbound and the other for inbound data. This includes IPTV video, telephone and Internet data.

By implementing these solutions, and the solutions that evolve from future technologies, Verizon provides the Commonwealth with significant technology resources to expand the network to support future business and application requirements.

9. Describe in detail the proposed enhanced toll free features.

Verizon Response

The Verizon proposed enhanced toll free features are:

Proposed Standard Features include:

- Extended Call Coverage
- Payphone Blocking
- Real Time ANI
- Guardian Guarantee

Proposed Enhanced Features include:

- Time of Day/Time Interval Routing
- Cross Corp Routing
- Day of Week Routing
- Exchange Routing
- Geographic/Point of Call Routing
- Percent Allocation

IVR features also available:

- Menu Routing
- Message Announcement
- Database Routing
- Busy/No Answer Rerouting (BNAR)

- TakeBack and Transfer (TNT)
- Announced Connect
- Automated Speech Recognition
- Standard Reports

10. List features not included in Verizon's proposed offer versus what is available today.

Verizon Response

Verizon is offering all toll free features that are available to the Commonwealth today. The toll free features available today from Verizon but not requested by the Commonwealth include the following "A La Carte" features:

- Alternate Routing (Super Routing and Set Routing Plans)
- Tailored Call Coverage
- Day of Year/Holiday
- DNIS,
- EDNIS
- Supp Codes
- Disconnect Message Referral
- ICT
- International Toll Free
- Verizon Enterprise Center (VEC)
- National Toll Free Listing
- Network Call Redirect
- Multi-Manager

11. List features offered differently (accomplishes similar outcome from Verizon's perception) in Verizon's response versus what is available today.

Verizon Response

Verizon's response does provide the same features that are available to the Commonwealth today. The names of the features are what vary. To clarify, the table below maps the current feature names to the proposed Verizon feature names.

Verizon 800 Feature Comparison

Currently Available	Description	Verizon Features Available	Description
NPA Routing	NPA Routing allows calls to be routed to a specific location based on the NPA number (area code) of the caller.	Point of Call Routing	Point of Call Routing allows customers to arrange for calls made to a single Toll Free number to be routed to an alternate destination based on each call's point of origin, state, NPA, and NPA-NXX.
NXX Routing	NXX Routing when combined with the NPA routing provides a 6-digit routing capability to route calls based on both the caller's area code and the caller's exchange.	Exchange Routing	Exchange Routing allows customers to arrange for calls made to a single Toll Free number to be routed to an alternate destination based on each call's exchange level, NPA-NXX.
Time of Day Routing	Time of Day Routing allows call to be changed based on a pre-determined time of day schedule.	Time of Day Routing	Time of Day Routing allows customers to arrange for calls made to a single Toll Free number to be routed to alternate destinations based on the time of the day.
Day of Week Routing	Day of Week Routing allows the destination of a call to be changed based on a pre-determined day of week schedule.	Day of Week Routing	Day of Week Routing allows customers to arrange for calls made to a single Toll Free number to be routed to alternate destinations based on the day of the week
Dialed Number Identification Service	This feature allows the subscriber with multiple, incoming 800 numbers to the same SDP to be able to identify which 800 number is being accessed.	Dialed Number Identification Service (DNIS)	Dialed Number Identification Service (DNIS) allows customers with multiple Toll Free numbers terminating at the same location to identify and route a call based on the number dialed.
Call Distribution Routing	Call Distribution Routing allows the agencies to specify the percentage of calls to be directed to two or more locations. Percentages offered are 0 to 100 percent in 1 percent increments.	Percent Allocation	Percent Allocation Routing allows customers to arrange for calls made to a single Toll Free number to be routed to two or more alternate destinations based on predefined whole percentages; the combined percentages must equal 100%. The allocation is based on call attempts.
Automatic Number identification Data Extract(ANI-DE)	The ANI-DE provides customers with the 10-digit identification of all calling parties along with other call detail information.	Real Time ANI	Real Time ANI (RTANI) allows customers to receive the telephone number of the calling party as a component of call setup.
Command Routing I	Command Routing I allows agencies to make changes to routing features on demand. It must be accessed by a customer using Routing Control Service 1. Routing changes, without being preplanned, can be implemented in under 10 minutes.	Toll Free Network Manager	Enables customers to examine their Toll Free network routing data, customize network features on a near real-time basis, and route inbound traffic dynamically in response to changing business needs, all without any intervention from Verizon.
Command Routing II	Allows agencies to have pre-planned alternate routing paths validated and stored in the network in the working decision tree for quick implementation (under 5 min.) It can be activated by the subscriber using Routing Control II or by calling AT&T directly.	Toll Free Network Manager/Guardian Guarantee	Toll Free Guardian guarantees the customer an alternative routing arrangement for domestic Verizon Business Toll Free Service. Alternate routing can be activated by the customer using Network Manager or by calling Verizon.

Currently Available	Description	Verizon Features Available	Description
Routing Control Service II	This feature allows customers to add, change, or delete selected FTS2000 Advanced 800 service routing features. Pending routing plans can be created and stored, and Command Routing 11 branches in a working decision tree can be activated.	Toll Free Network Manager	Enables customers to examine their Toll Free network routing data, customize network features on a near real-time basis, and route inbound traffic dynamically in response to changing business needs, all without any intervention from Verizon.
Alternate Destination Routing	ADR can redirect calls to other 800 service terminations within the FTS2000 Network only. ADR can be used for a Ring No Answer condition, a Busy condition, or both.	Network Call Redirect(NCR)	Network Call Redirect is an advanced feature that redirects calls to other pre-defined alternate location(s) during outages, busy conditions, or when agents are not present to handle calls.
Next Available Agent Routing	This feature allows a customer to reroute calls to up to 99 alternate locations if a primary location is busy. A limit may be set on the number of calls that can be in progress at each location.	Custom Call Routing	Through call load-balancing, Custom Call Routing allows customers to spread calls automatically across locations and staff, helping them answer more calls and maximize agent productivity.
Routing Control Service I	RCS I allows customers to access the Network Support System and to change Time of Day and Day of Week Routing.	Toll Free Network Manager	Enables customers to examine their Toll Free network routing data, customize network features on a near real-time basis, and route inbound traffic dynamically in response to changing business needs, all without any intervention from Verizon.
Network Queuing	This feature is available in conjunction with NAAR. It allows a delayed announcement to be played and queue calls in the network if all alternate terminations are busy. The calls in queue will route to the first termination that becomes available.	Network Queuing(MCS)	Verizon will provide its MCS-Genesys, which will allow a caller to 'park' a call on a network Enhanced Service Platform, play a message un-park, and terminate to the desired destination.
TTY Recognition	Callers who are hearing-impaired can use a special Telecommunications Device for the Deaf (TDD) to dial your 800 number and communicate with your attendant via a computer terminal.	Teletypewriter(TTY)	Callers who are hearing-impaired can use a special Telecommunications Device for the Deaf (TDD) to dial your 800 number and communicate with your attendant via a computer terminal.
Recorded Announcement	Recorded Announcements allow calls to be completed within the network to a recorded announcement. The announcement may be customer-specific, and the message must deal with the successful completion of the call.	ECR/Message	With ECR Message Announcement, the caller hears a pre-recorded promotional or informational message prior to, during, or after the call is routed to the caller-selected destination.
Foreign Language Announcement	This feature allows your agency's messages to be recorded in several languages which provides greater service to all customers; domestic and foreign.	ECR/Message	This feature allows the customers messages to be recorded in several languages. Obscure languages require additional lead time.
Emergency Announcements	In most situations, the AT&T network can update and activate your announcements w/in I hour. This will provide callers with up to the minute information about your business and conditions at	ECR/Remote Audio	Remote Audio Update allows customers to make real-time (within 15 minutes) updates to their audio messages that callers hear using their assigned ID number and Password.

Currently Available	Description	Verizon Features Available	Description
	your location.		
Generic Announcements	With this feature you can choose from a pool of announcements (prerecorded by AT&T) to meet the business operating needs of your agency.	ECR/System Messages(Message)	Included with Message Announcement are a variety of standard messages a customer may choose from that may eliminate the need to record any new messages.
Enroute Announcements	This feature allows you to provide information to your caller, while the call is being routed. For example, a caller can be asked to have certain information ready before the attendant is connected.	ECR/Message	With ECR Message Announcement, the caller hears a pre-recorded promotional or informational message prior to, during, or after the call is routed to the caller-selected destination.
Selection Announcements	Selection Announcements allow the agency to determine the routing of calls based on the additional digits input by the caller.	ECR/Menu	Menu Routing enables callers to choose the path they need to reach a specific person, department, location or message announcement
Courtesy Transfer (Transfer Connect)	Transfer Connect allows a terminated 800 call to be transferred	ECR/Unattended Takeback and Transfer (TNT)	This feature allows the called party to transfer a call to another location; the first agent hangs up as soon as he/she enters the transferring digits. When the second agent answers, he/she is speaking to the caller.
Consult and Transfer	A call transfer which allows the transferring agent to retain the customer if the "transferred to" number is busy	ECR/Attended Takeback and Transfer(TNT)	This feature allows the called party to transfer a call to another location. The transferring agent connects with the second, announces the call, and then hangs up budging the caller with the second agent.
Conference and Transfer	A call transfer with three-way conference capability	ECR/3-Way Takeback and Transfer(TNT)	This feature allows the called party to transfer a call to another location. This is a form of conferencing where all three people can remain on the phone at once, and talk to each other.
Speech Recognition	This feature allows callers to make verbal responses to queries that require input from the caller.	ECR/Speaker Independent Voice Recognition(SIVR)	This feature allows the caller to reply to a menu of options with speech, 0-9, yes and no.
DNIS Process	InfoWorx identifies the number dialed and directs the caller to the appropriate application script.	DNIS	ECR using the DNIS delivered to the platform to route the caller to the appropriate call flow logic.
Automatic Number identification(ANI)	InfoWorx can receive the calling party's number and automatically customize the call flow, route the call, or provide unique processing based on ANI.	ANI(May utilize the DNIS features)	ECR can receive the calling Database, NPA/NXX, or party's number and automatically customize the call flow, route the call, or provide unique processing based on AN I.
DTMF Processing	AT&T's InfoWorx reads and responds to the caller's dual-tone multi-frequency (DTMF) touch-tone input. This allows callers to make selections from menus and enter data simply by pressing keys on their touch-tone phones, thereby directing the call flow.	ECR/Menu	Menu Routing enables caller's to choose the path they need to reach a specific person, department, location or message announcement using their touch tone key pad.
Speech Storage	AT&T's InfoWorx stores digitized speech elements, words, phrases, and complete messages, and automatically assembles them into customized responses. The speech generally consists of	ECR/Menu/Message	ECR stores a pool of generic messages and also stores recorded menus and messages specific to the customer's application.

Currently Available	Description	Verizon Features Available	Description
	instructions, menu prompts, or informational messages.		
Frequent Speech Updates	Infoworx allows you to call into an AT&T provided 800 number via touch-tone phone as frequently as once per day to change existing speech elements in your voice application. More frequent changes are available on an individual case basis.	ECR/Remote Audio	Remote Audio Update allows customers to make real-time (within 15 minutes) updates to their audio messages that callers hear using their assigned ID number and Password.
Database Storage	AT&T's InfoWorx maintains application software in the voice response complex and can store databases required by the applications to provide any specific information and/or to take specific call routing/processing action.	ECR/Database	This feature enables calls to be routed automatically to the appropriate destination based on a customer-designed database. Data fields contain information for use by the call processing application.
Data Connect	Infoworx supports remote host access to 3270 data stream compatible computers. This feature enables callers to access order entry, account information billing, tracking, and other business data resident in computer systems on a customer site.	ECR/Host Connect	This feature allows ECR to exchange data with a customer's database, PC, or Mainframe system. HostConnect provides communication between the caller and data at the customer site through the Verizon network. Information on the customers host computer can be retrieved or updated.
Music on Hold	When InfoWorx initiates a transfer, the caller is placed on hold while music is played. In lieu of Music on Hold, a promotional message may be played.	ECR/System Messages(Message)	Included with Message Announcement is a recording of music that may be played while a caller is on hold. Other messages may be chosen to play instead of music.
Call Reroute	InfoWorx can automatically reroute callers to alternative destinations when a no answer or busy condition is encountered. Callers will be routed based upon a customer's desired alternate routing requirements.	ECR/Busy No Answer Reroute(BNAR)	If a call reaches a busy signal or is not answered within a specified number of rings, BNAR automatically reroutes the call to a pre-specified alternate location or to a recording. The caller never hears a busy signal or ringing without an answer.
Gateway Connect	Infoworx can transfer callers to other voice response/voice messaging services or to live agents and allows them to return to the original Infoworx menu selection by entering a touch tone sequence on their telephone key pad.	ECR/Caller Takeback/Called Party Giveback	Caller TakeBack allows a caller to return to the ECR menu to make additional call routing selections, or to access hidden menus not available during the initial selection process. Giveback allows the agent to disconnect and return the caller to the menu for further selections.
Intelligent Connect	When Infoworx initiates a transfer, the caller is placed on hold with music while the agent receives the transferred call. When the agent answers the call, the application can play a brief message heard only by the agent.	ECR/Announce Connect	Announce Connect provides a customized message to the called party before the caller is connected, alerting the called party with certain information about the caller. It can also alert the called party to the nature of the call and can allow pre-access of pertinent customer/caller records or other stored information.
Automatic Speaker Recognition	Infoworx can provide speaker independent automatic speaker recognizing 0-9. Yes-no.	ECR/Speaker Independent Voice Recognizing SIVR	This feature allows the caller to reply to a menu of options with speech 0-9. Yes-no
Text to Speech	Infoworx can provide speech		SIVR is available for simple speech,

Currently Available	Description	Verizon Features Available	Description
	synthesis eliminating the need for professional speech recording and shortening application time to market.		directed dialogue, and natural language.
Intelligent Connect w/ ISDN	Infoworx can support Computer Telephone Integration facilitating the marriage of caller data with an agent transfer. The agent is provided caller data prior to completing the call bridge.	ECR/Announce Connect	Announce Connect provides a customized message to the called party before the caller is connected, alerting the called party with certain information about the caller. It can also alert the called party to the nature of the call and can allow pre-access of pertinent customer/caller records or other stored information.
Voice Capture	The Infowork voice capture feature allows callers spoken information such as name and address to be recorded. This information then can be retrieved by transcription service, and transcribed to a diskette, mailing labels and various other media.	Voice Portal	Lead Capture is available to verify address information against the directory assistance database or internal database. If no match a WAV file can be recorded with address information
Promotional & Informational Announcements	With Infoworx customers can develop a promotional or informational message which numerous callers reach via an 800 number and listen to simultaneously.	ECR Message	With ECR message announcement, the caller hears a pre-recorded promotional or informational message prior to, during, or after the call is routed to the caller's selected destination.
Fax Catalog	The InfoWorx fax catalog combines all the features and flexibility provided by the InfoWorx interactive voice response applications with the ability to deliver documents and text to a caller's fax machine.	Fax Catalog	Fax catalog feature permits callers to retrieve documents or forms from a facsimile catalog using DTMF prompts to request one or more documents to be faxed to the caller's group III compatible Fax terminal.
Flexword Automatic Speaker Recognition	Infoworx Automatic Speaker Recognition allows customers to create custom, speaker independent vocabularies or up to 2000 words or Vocabularies phrases allowing callers to speak the name of the function they want.	ECR/Speaker Independent Voice Recognition(SIVR)	SIVR is available for simple speech, directed dialogue, and natural language.
Foreign Language Speech Recognition	Expands AT&T's whole speech recognition vocabulary of 0-9, yes - n0 to include the equivalents in Mexican, Spanish, Canadian, French, and UK English.	ECR/Speaker Independent Voice Recognition (SIVR)	This feature allows the caller to reply to a menu of options with speech, 0-9, yes-no available in Spanish and French.
Names/Address Lookup	Uses the caller's telephone number to ECR/Database determine the name and address of the caller using an accurate on-line database in real-time.	ECR/Database	This feature enables calls to be routed automatically to the appropriate destination based on a customer-designed database. Data fields contain information for use by the call processing application.
Telecommunications Devices for the Deaf(TDD)	Infoworx features can be offered to the hearing impaired community using TDDS.	Teletypewriter(TTY)	Callers who are hearing-impaired can use a special Telecommunications Device for the Deaf (TDD) to dial your 800 number and communicate with your attendant via a computer terminal.

12. Address Verizon's willingness to participate in COSTARs. If unwilling to participate, please explain why.

Verizon Response

Verizon will participate in COSTARS.