Commonwealth of Pennsylvania Telecommunications Managed Services
RFP #6100004339

May 18, 2009

Agenda

Agenda and Opening Remarks (Question 1)

Gene Scott, Sr. Vice President, Government and Education

CTMS Solution (Questions 2, 3 & 4)

Shawn Hakl, Vice President, Global Solutions

Transition (Question 6)

Bill Messerle, Director, Program Management Office

High Bandwidth Provisioning, Cost Reduction and COSTARS (Questions 8b, 7 & 12)

Manish Nasta, Vice President, Solution Engineering

Toll Free, Co-Management and Security (Questions 9, 10, 11, 5 & 8a)

Danny Johnson, Business Solutions Manager

Value to the Commonwealth

Bette Derogatis, Vice President, Pennsylvania Government and Education

The Verizon Difference

- Verizon is strongly committed to providing a significant reduction from current spend
  - Acceptance of SLAs
  - Universal Rate Structure
  - Leveraging efficiencies of emerging technologies and driving year-over-year technology cost improvement

- Verizon will provide a painless transition to a superior long-term solution
  - Full support of CTMS
    - Introduction of flow-through automation
  - Leverage Verizon's world-class Service Delivery methodologies
    - Strong risk management approach that minimizes service disruptions
    - Agency-specific business management approach

- Evolution to Proven Next-Generation Technologies
  - Transition to private MPLS network allows for evolution at Commonwealth's pace
  - Solution moves the Commonwealth to IP-enabled environment
    - VoIP, Video Conferencing, Virtualization
  - The Commonwealth has access to Verizon's continual enhancements/upgrades <u>without any Commonwealth investment</u> (Verizon has spent $13 billion in Pennsylvania in the last decade)

- Financial Stability of Key Partner - Verizon
  - Fortune 20 company with revenues in excess of $100 billion
  - $186 billion in assets
  - Unwavering stability during current economic crisis

CTMS Solution
Questions 2, 3 and 4

Shawn Hakl
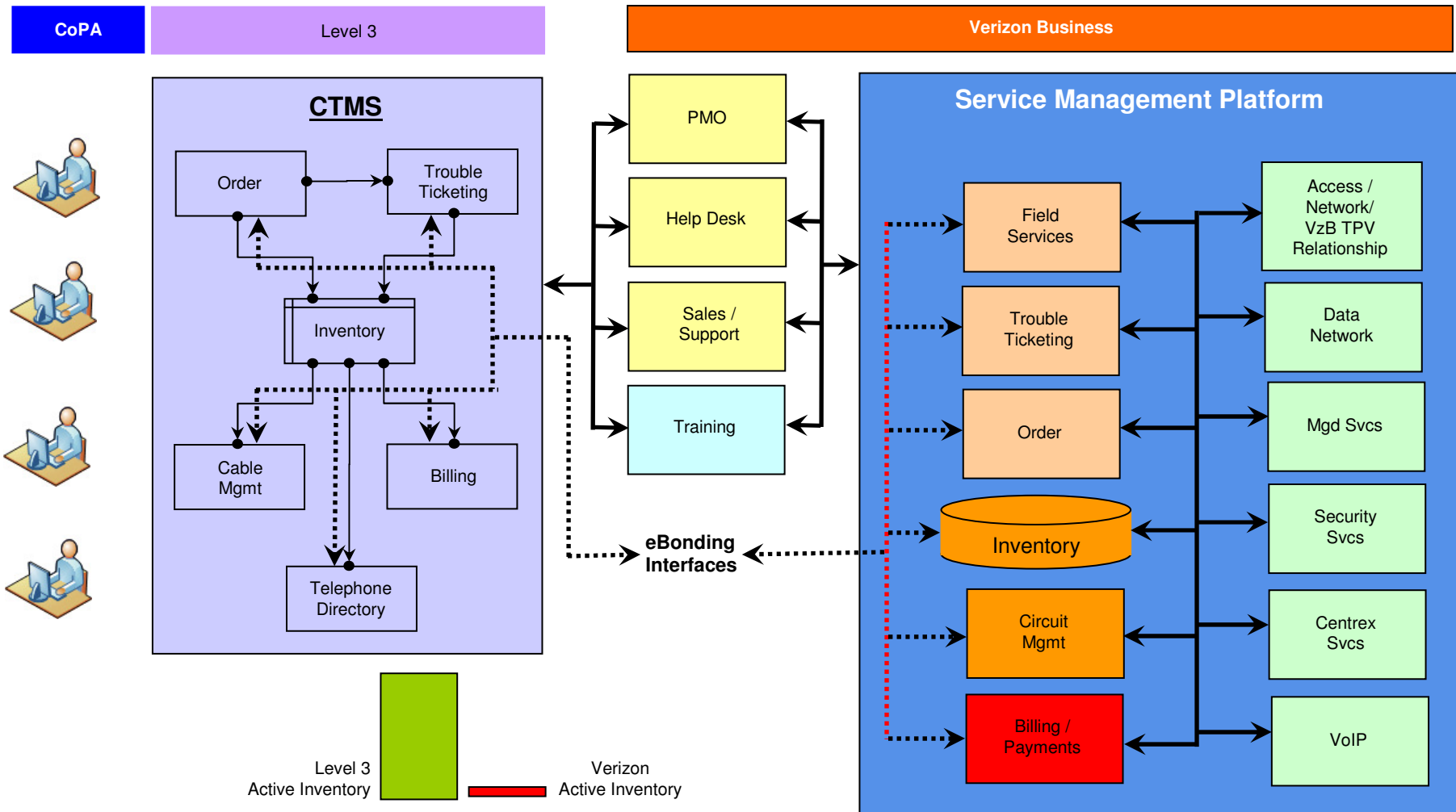**Vice President, Global Solutions**

Executive Summary

- Verizon's approach to the management of CTMS has evolved since our initial submission, based on your feedback and additional due diligence:
  - Recognize value of current investments and need to avoid disruption to user community

- Verizon's approach to CTMS is based on three phases:
  - Phase 1: Transition – Integration of Verizon tools into the CTMS ecosystem
  - Phase 2: Transformation – Moving operations and management from current supplier to Verizon
  - Phase 3: Steady State – Ongoing maintenance and upgrades of the CTMS platforms

- Verizon's approach is focused on the following:
  - Equivalent or improved CTMS user experience with Verizon as the service provider
  - Proactive risk mitigation for the 2011 operations change over
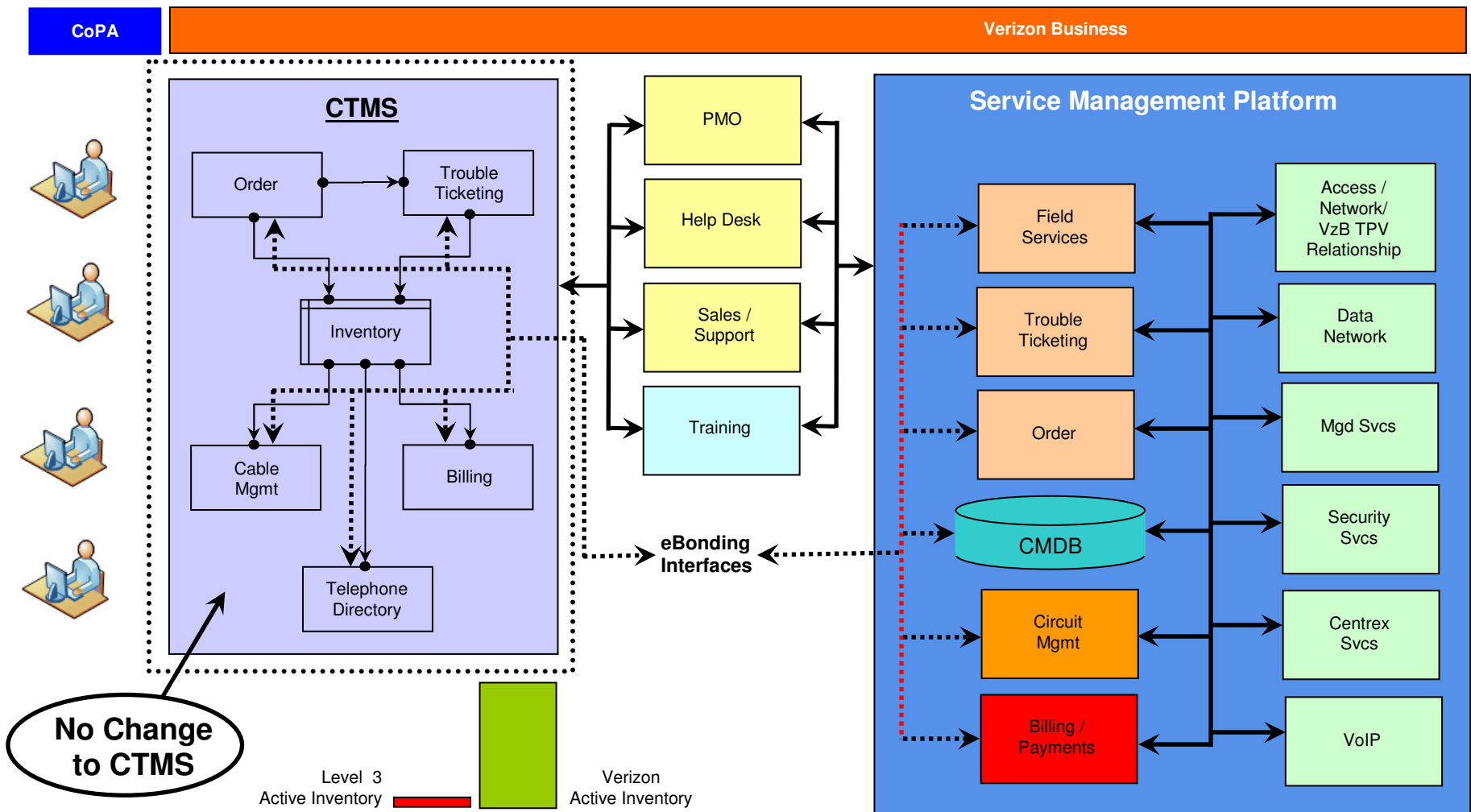 - Cost effective, flexible support for ongoing operations

- **Due Diligence on existing process flows and key interface points**
  - SME interviews and process reviews for Order, Change, Billing, Trouble Ticketing, Inventory, and Network Monitoring
  - Technical environment review
    - Apple Servers with Web Objects/ Java Frameworks
    - Sun Servers with Remedy
    - Sun Servers with Oracle
    - Sun Servers with Web and Applications
- **Joint Project Plan for ebonding implementation**
  - Verizon to provide draft
  - Commonwealth to approve final dates
- **Develop Interface Control Documentation (ICD) for electronic bonding interfaces**
  - Security and application standards review
- **CTMS system ebonded to Verizon SMP for tasks within 180 days of contract award**

CoPA

Verizon Business

CTMS

Order → Trouble Ticketing

Inventory

Cable Mgmt

Billing

Telephone Directory

PMO

Help Desk

Sales / Support

Training

No Change to CTMS

Level 3 Active Inventory

Verizon Active Inventory

eBonding Interfaces

Service Management Platform

Field Services

Trouble Ticketing

Order

CMDB

Circuit Mgmt

Billing / Payments

Access / Network/ VzB TPV Relationship

Data Network

Mgd Svcs

Security Svcs

Centrex Svcs

VoIP

- **Due Diligence on technical environment**
  - Hardware and software inventory
  - Design and development documentation
  - Review existing vendor agreements
  - Change and release management process review
- **Joint Project Plan for tech refresh and operations transition**
  - Verizon to provide draft
  - Commonwealth to approve final dates
- **Refresh technical environment prior to operations hand off**
  - Avoid need for duplicate environments
  - Due to assumed age of equipment and OSS software, some software changes may be needed
  - Assume existing provider will be willing to provide service regardless of hosting location as transition service
- **Technical environment refresh completed 6 weeks prior to operational transfer**
- **Operational transfer to take place February 2011**
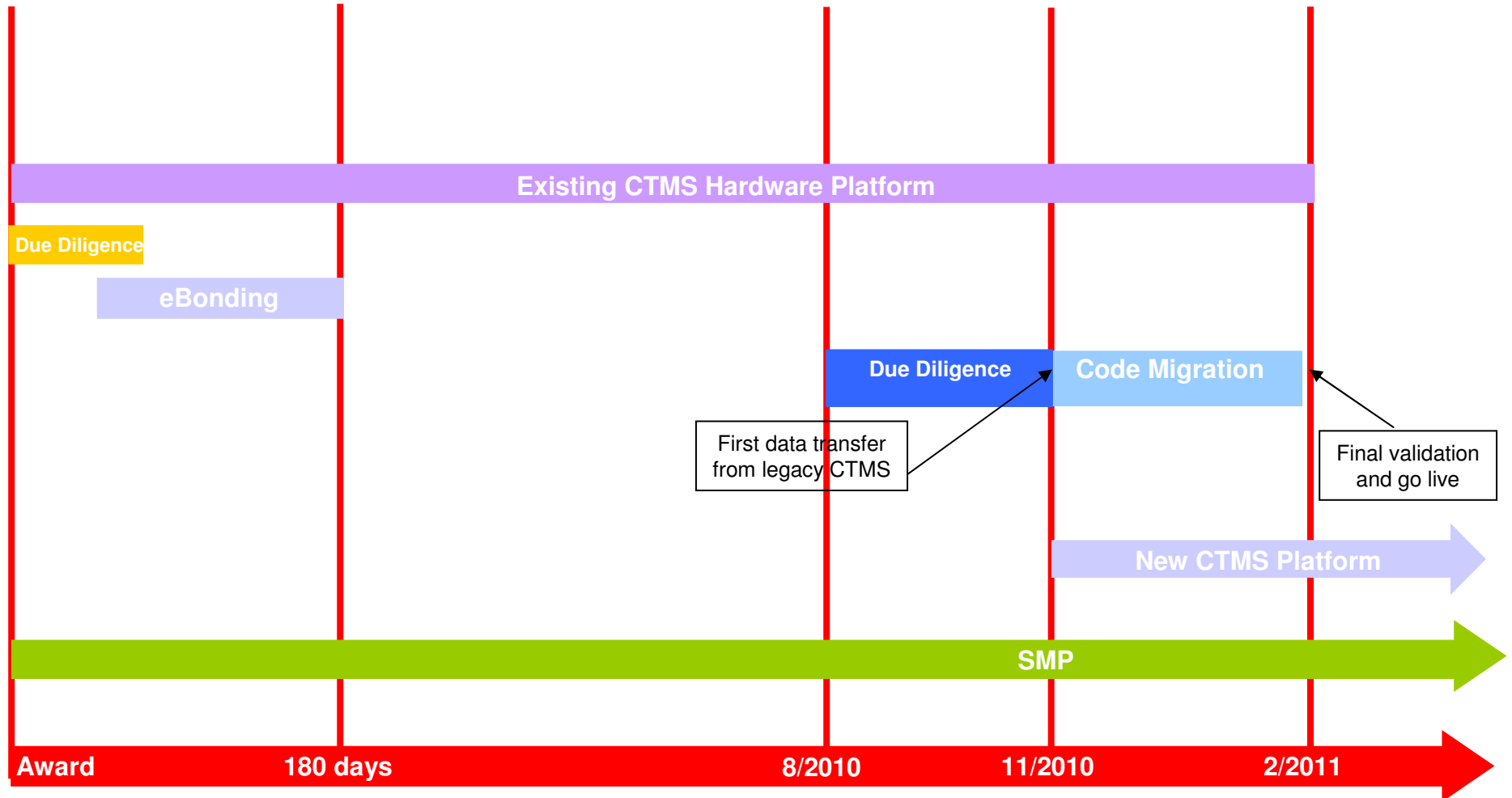
Transitional Risk Mitigation

Potential Risk	Mitigation Approach
Disruption to end-user community	CTMS will remain in place with no changes to end-user interface or supported business processes
Retention of systems knowledge	Early identification of key resources, structured knowledge capture process and parallel operations environment
Loss of historical data	Verizon will electronically bond with existing CTMS data stores, ensuring continuity of historical records
System availability during transition	Pre-build of technical environment for refresh allows dual operations prior to cut over

- Verizon will be responsible for operation and maintenance of CTMS
  - Commonwealth may extend capabilities of CTMS on SOW basis
- As determined by the Commonwealth's needs, extend CTMS into the Verizon OSS architecture

  - SMP is the interoperability with existing customer and supplier toolsets, developed by Verizon to minimize risk and reduce transition costs
  - SMP is a SOA-based platform, providing the tools to manage ITIL processes supporting a customer's telecom infrastructure in a multi-vendor environment
  - Allows the Commonwealth to leverage Verizon's continued investment in telecom systems

- Leverage the established investment of CTMS with the strength of the ITIL-based SMP platform to provide integration that extends the capabilities of CTMS
  - Verizon can make its own OSS experts available as needed to share innovation and experience in platform development

Transition
Question #6

Bill Messerle
Director, Program Management Office

Transition Methodology
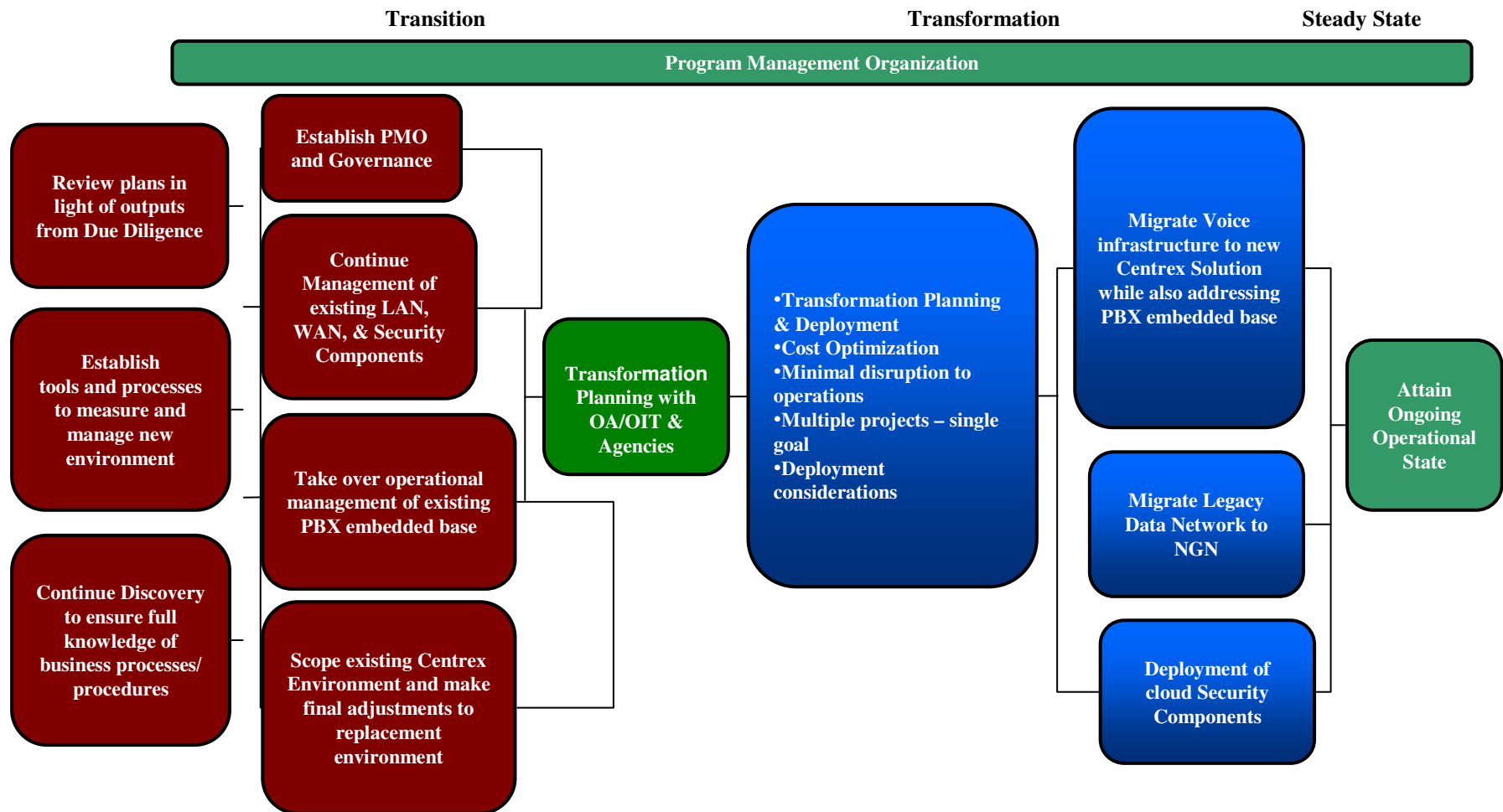
- OA/OIT & Agency Specific Management Methodology

- On-Site Staff Continuity Through Term of Contract

- Globally proven Management Standards Provide Discipline and Best Practice Transition Model

- Driven by Commonwealth Production Schedule to Reduce Risk

- Continuous Improvement Management Model

- Leverage existing in place Verizon resources knowledgeable with Commonwealth account

Verizon Transition Approach

Transition & Transformation Methodology

Transition	Transformation	Steady State

Program Management Organization

Review plans in light of outputs from Due Diligence

Establish tools and processes to measure and manage new environment

Continue Discovery to ensure full knowledge of business processes/ procedures

Establish PMO and Governance

Continue Management of existing LAN, WAN, & Security Components

Take over operational management of existing PBX embedded base

Scope existing Centrex Environment and make final adjustments to replacement environment

Transformation Planning with OA/OIT & Agencies

• **Transformation Planning & Deployment**
• **Cost Optimization**
• **Minimal disruption to operations**
• **Multiple projects – single goal**
• **Deployment considerations**

Migrate Voice infrastructure to new Centrex Solution while also addressing PBX embedded base

Migrate Legacy Data Network to NGN

Deployment of cloud Security Components

Attain Ongoing Operational State

ONE TEAM - GOVERNED BY PMO

CLIENT MANAGEMENT AND SOLUTIONS DEVELOPMENT → **IMPLEMENTATION** → **CONTINUOUS IMPROVEMENT** → **CUSTOMER CARE**

Account Manager
- Cheryl Caplan
- Toni Sharp
- Wes Smeigh
- Tonya Fazio

Sales Engineer
- Cory Shollenberger
- John Matthews
- Deb Baker
- Dave McGough
- TBD

Solutions Consultants
- Suzanne Keith
- Michael Drahusz
- John Goldsborough
- Brian Campbell

Project Managers
- Matt Keagy
- Mark Keller

Product Delivery Managers
- TBD

Solutions Architects
- Noel Richards

Security Manager
- TBD

Performance
- Applications Performance
- Metrics
- OLAs/SLAs

Technical Service Manager
- Doug Dale
- Arthur Lewis
- Paul Mazur
- Jeff Showers

Managed Network Operations Center
- Jay Donough
- Scott Cathell
- Frank Lonce
- Chris Youngblood
- Mike Barnhart
- Norm Elias
- Brian Bennett

Dedicated COPA Help Desk
- Inbound 24 x 7 trouble mgmt /repair support

Service Manager
- Pam Wittle
- Lynn McEntire
- Kimberly Green
- Valisa Dutrieuille
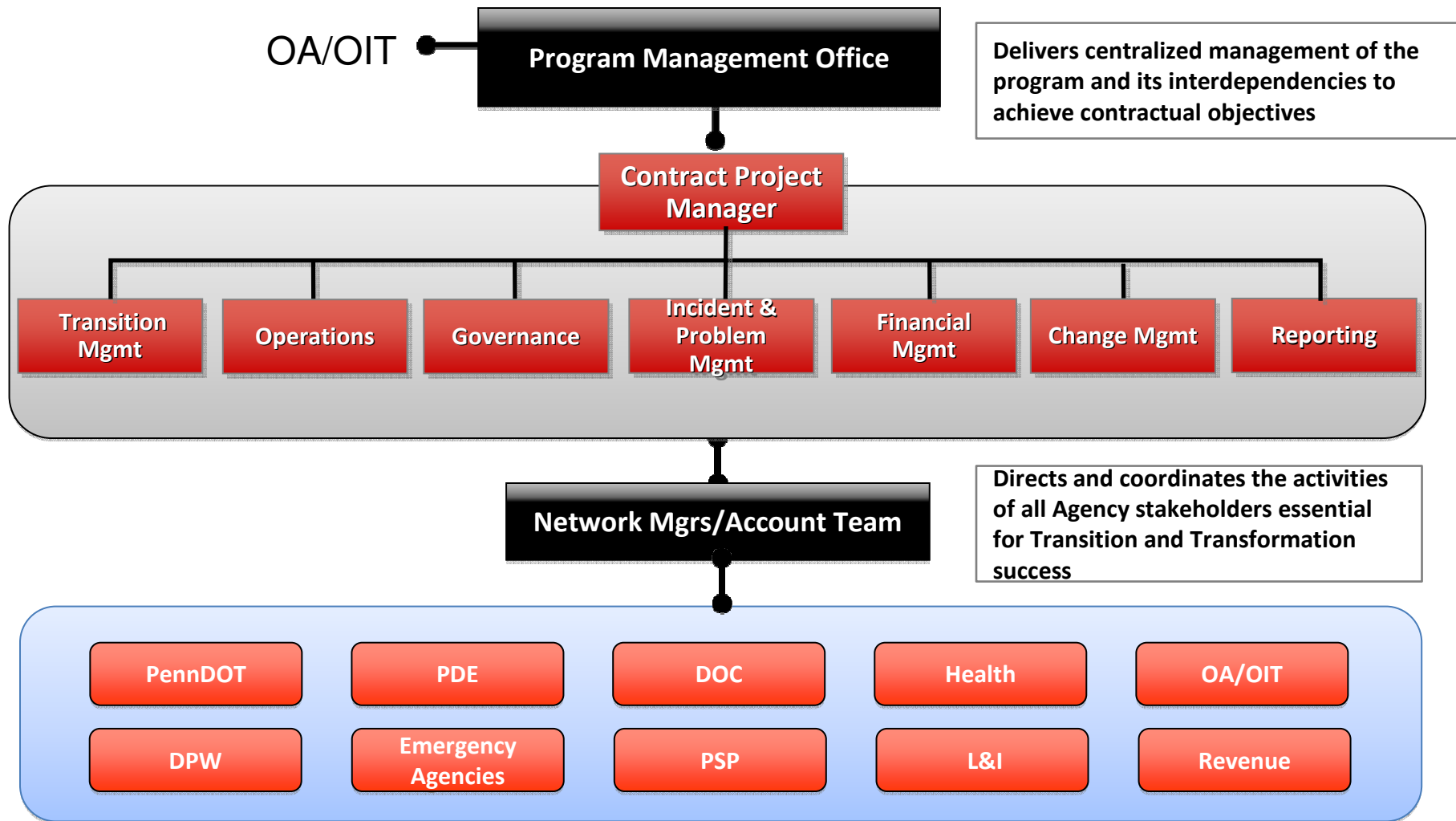
Dedicated COPA Help Desk
- TBD

COPA Interaction
- Governance Participation
- Process Integration
- Communications Plan
- Satisfaction Feedback

END-TO-END ACCOUNTABILITY

Program Management Office Structure

OA/OIT —— **Program Management Office**

Delivers centralized management of the program and its interdependencies to achieve contractual objectives

Contract Project Manager

Transition Mgmt	Operations	Governance	Incident & Problem Mgmt	Financial Mgmt	Change Mgmt	Reporting

Network Mgrs/Account Team

Directs and coordinates the activities of all Agency stakeholders essential for Transition and Transformation success

PennDOT	PDE	DOC	Health	OA/OIT
DPW	Emergency Agencies	PSP	L&I	Revenue

Risk Management

- OA/OIT & Agency Business Continuity Plans Accommodate Specific Requirements

- High Availability Design Ensuring Service Continuity

- Co-Located PMO Ensures Key Team Member Availability

- PMP-Certified Project Managers Provide Transition Management Excellence

- CTMS Continuity Eliminates User Learning Curve

- Due Diligence Ensures Accurate and Complete Information

- Detailed Design Review Guarantees Commonwealth Needs are Addressed

- Roles and Responsibilities Managed Using RACI Methodology

- Implementation of Specific Risk Mitigation Plans Ensures Order-by-Order Excellence

- ITIL V3 Methodology for Consistency and Discipline

- Continuous Improvement Feedback Loop for Lessons Learned

- Multi-Level Governance for Expectations and Performance Feedback

- CTMS to SMP eBonding for Automated Flow-Through Provisioning

High Bandwidth Services
Question #8b

Manish Nasta
Vice President, Solution Engineering

High Bandwidth Services

- Regardless of location, Verizon can deploy higher bandwidth services with universal rates anywhere in the Commonwealth

- Verizon's Converged Packet Architecture (CPA) is utilized to provide a scalable, reliable and secure Ethernet-switching infrastructure to deliver Ethernet services

- Verizon utilizes the same procedure everywhere in PA to determine bandwidth requirements, verify capacity, confirm facility availability, and provision high-bandwidth services

- Support Commonwealth's requirements for high-bandwidth anywhere in Pennsylvania
  - Leverage large existing high-bandwidth landline infrastructure
  - Expand solution options with wireless 4G deployment in Pennsylvania (up to 50 Mbps downstream)

Cost Reduction
Question #7

Manish Nasta
Vice President, Solution Engineering

Cost Reduction

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

- Universal rates throughout the Commonwealth
- No Verizon costs for migration/transition to the Commonwealth
- Extensively deployed broadband infrastructure and resources throughout the Commonwealth
- Voice services – Lowered costs for Centrex and migration to VoIP
- Next generation Data network, based on MPLS, 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

Cost Reduction

Verizon's financial strength and stability allow us to continually invest in next generation technologies in Pennsylvania to lower costs. Examples of this investment include the following:

- Ubiquitous deployment of high bandwidth Ethernet throughout the Commonwealth
- Verizon views Pennsylvania as a very important state for mobile broadband services and will continue to deploy mobile broadband using 3G (current) and 4G (future) technologies
- Fiber to the premises deployment (FiOS) throughout Pennsylvania
- Full deployment of broadband in Pennsylvania by 2015
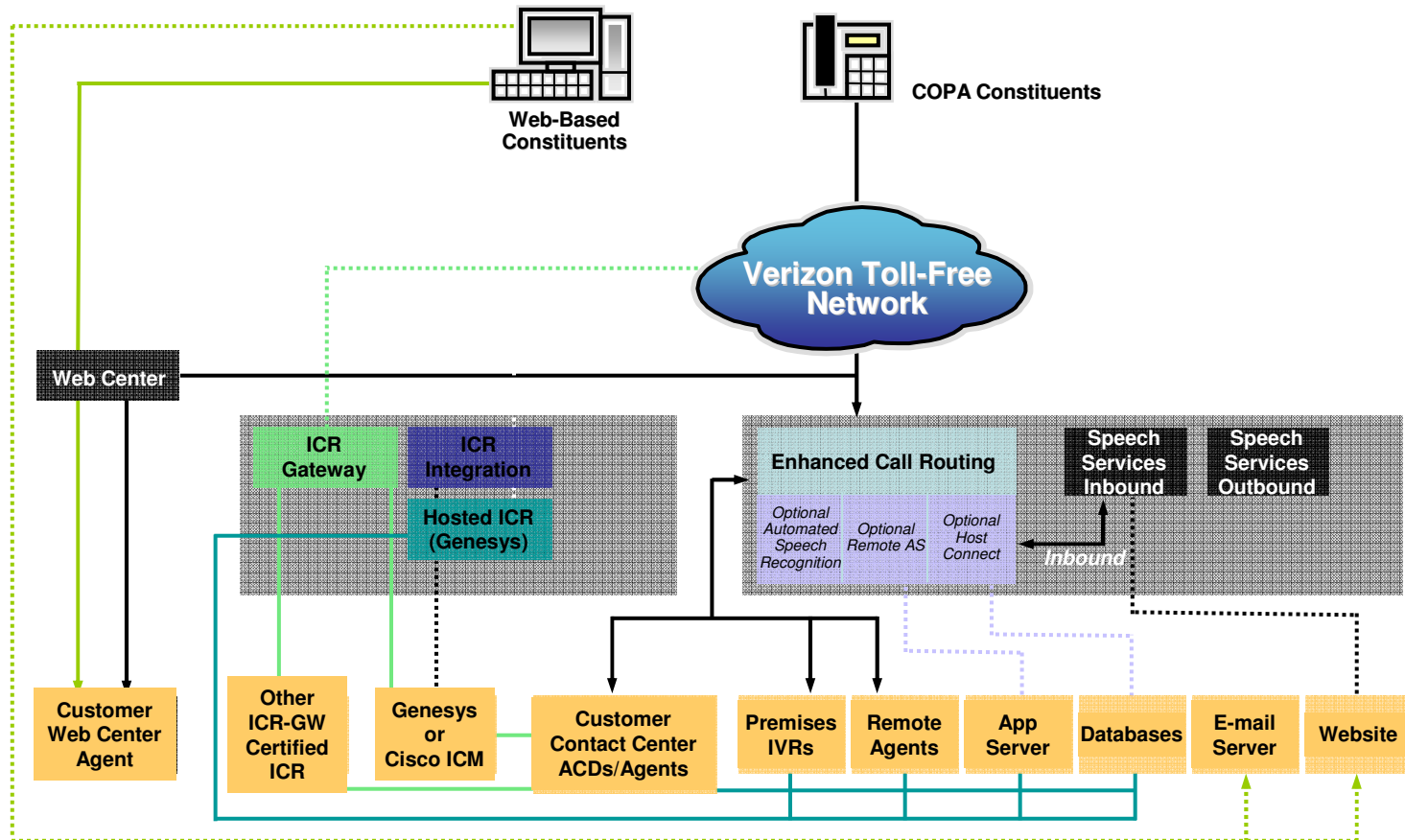
Verizon will participate in COSTARS.

Toll Free
Questions 9, 10 & 11

Danny Johnson
Business Solutions Manager

Verizon's Toll Free Integrated Solution

Toll Free Offerings

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

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

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

Verizon Toll Free services Integrated into IVR, Enhanced Call Routing, and ACD/Contact Center Services

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

Co-Management and Security
Questions 5 & 8a

Danny Johnson
Business Solutions Manager

Network Co-Management

Verizon has been providing managed services to Commonwealth agencies for nearly 20 years. Verizon continues to leverage our knowledge of Commonwealth networks through our proposed Managed Services options:

- Bronze service level
    - Logical access control
    - Proactive device monitoring
    - Web-based portal access for performance reports

- Silver service level
    - Logical configuration requests through network manager or on-line portal

- Gold service level
    - Enhanced application and performance reporting

- Network Managers
    - Included with all service levels
    - Currently supporting Commonwealth agencies today

![Verizon logo]

Security Co-Management/Security Incident Reporting

Verizon will provide an on-site certified senior security resource in Harrisburg that will support implementation and on-site issues for the life of the contract. Verizon has been providing security services to the Commonwealth for nearly 15 years.

- Fully managed service
  - Full access by both agency and Verizon

- Shared Access
  - Rule base management by agency
  - Full access to device by agency

- Integration into Commonwealth Security Incident Reporting Process
  - 24x7 monitoring and management
  - Security events logged and reported in security portal
  - Incidents escalated in accordance with Commonwealth procedures
    - OPD SEC024A and OPD SEC024B
  - Monthly, quarterly, and annual reporting through jointly developed governance model

Conclusion: Commonwealth's Experience with Verizon

Commonwealth Drivers	Verizon-Delivering the Network of the Future
Low cost, best value solution	Verizon solution with significant cost reduction; Universal rate structure; Leverage current/emerging technologies
Painless transition to superior long-term solution	Partnership with OA/OIT and agencies; Full support of CTMS; Proven risk management
Evolution to Next Gen Technologies	Private IP (MPLS) infrastructure; Commonwealth's ability to leverage Verizon's technology investment
Financial Stability of Partner	Verizon is a Fortune 20 Company with $100 billion in Revenues; Economic Viability during Financial Tsunami

Financial strength and technology leadership to make it happen for you!