

**United States
Department of Veterans Affairs**

**Internet Protocol version 6 (IPv6)
Pilot Process Document**



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**IPv6 Program Management Transition Office
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SIGNATURE PAGE

The Department of Veterans Affairs (VA) Internet Protocol Version 6 (IPv6) Pilot Process v1.0 document is approved by:

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Date

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1 Introduction

The Department of Veterans Affairs (VA) network backbone is in the midst of a significant Internet Protocol (IP) transition. This transition will allow both Internet Protocol version 4 (IPv4) and new Internet Protocol version 6 (IPv6) traffic to travel VA's extensive network. This important transition will involve every part of VA's network core and will include every service VA provides.

Along with significantly increased address space, IPv6 will provide additional or enhanced services for Veterans, including improved security provisions.

VA plans to design and conduct business case pilots which will employ IPv6 for communication. This document is intended to describe the process VA will employ to plan, construct, monitor, and control the individual pilots and implement a workable IPv6 test

2 Purpose of the pilot process document

The planned pilots will demonstrate usability of implementing specific business solutions using IPv6. The purpose of this IPv6 Pilot Process document is to describe the common approach, methods, controls and processes intended for all pilot activity. Depending on the business needs of a particular pilot, the process also includes an independent set of steps, as required.

The IPv6 pilot process describes all activities leading up to pilot launch including identifying an initial pilot candidate; candidate evaluation and selection; selecting a pilot team; roles and responsibilities; managing change within pilots; and preliminary vendor selection criteria. The process document also describes steps for each project to develop their own charter and a formal business case as recommended by suggested CIO Council guidelines. The process structure continues with steps for each pilot team to establish a project schedule; acquire needed test equipment or devices; develop user training (as needed); and lastly, install, test and deploy the pilot.

3 Background

As the second largest federal agency, VA has over 240,000 employees working at clinics, hospitals, and offices throughout the nation. VA is comprised of a Central Office (VACO) located in Washington DC, and field facilities administered by three major line organizations: the Veterans Health Administration (VHA), the Veterans Benefits Administration (VBA), and the National Cemetery Administration (NCA).

VA's network is organized and administered by separate regions and Veterans Integrated Service Networks (VISNs), which require a broad spectrum of services using internet and VA's core infrastructure. As prescribed in OMB's 2005 directive M-05-22, VA demonstrated IPv6 connectivity across its network in March 2008, ahead of the mandated June 2008 timeframe.

4 Goals and objectives

Unlike a laboratory test environment where all aspects of the test are defined, an IPv6 pilot will be conducted in a live environment with limited distribution. The pilot's goal will be to achieve IPv6 transport. Connectivity will be demonstrated in end user business processes, interfaces, co-residency with other applications, and performance on existing hardware.

The pilot process goal will be to:

- Create a common set of process steps for use by all pilots
- Define Entry and Exit criteria for each step
- Implement controls to insure predictable results
- Demonstrate value or Return on Investment (ROI)
- Provide transparency for audit purposes
- Demonstrate a consistent approach which can be employed in future pilots

5 Scope

This document will include descriptions for processes used for all potential pilots, both common steps and specific steps required to implement a specific pilot. The overall process is illustrated in the following figure. The high level solid line separates common pilot steps from individual pilots' steps.

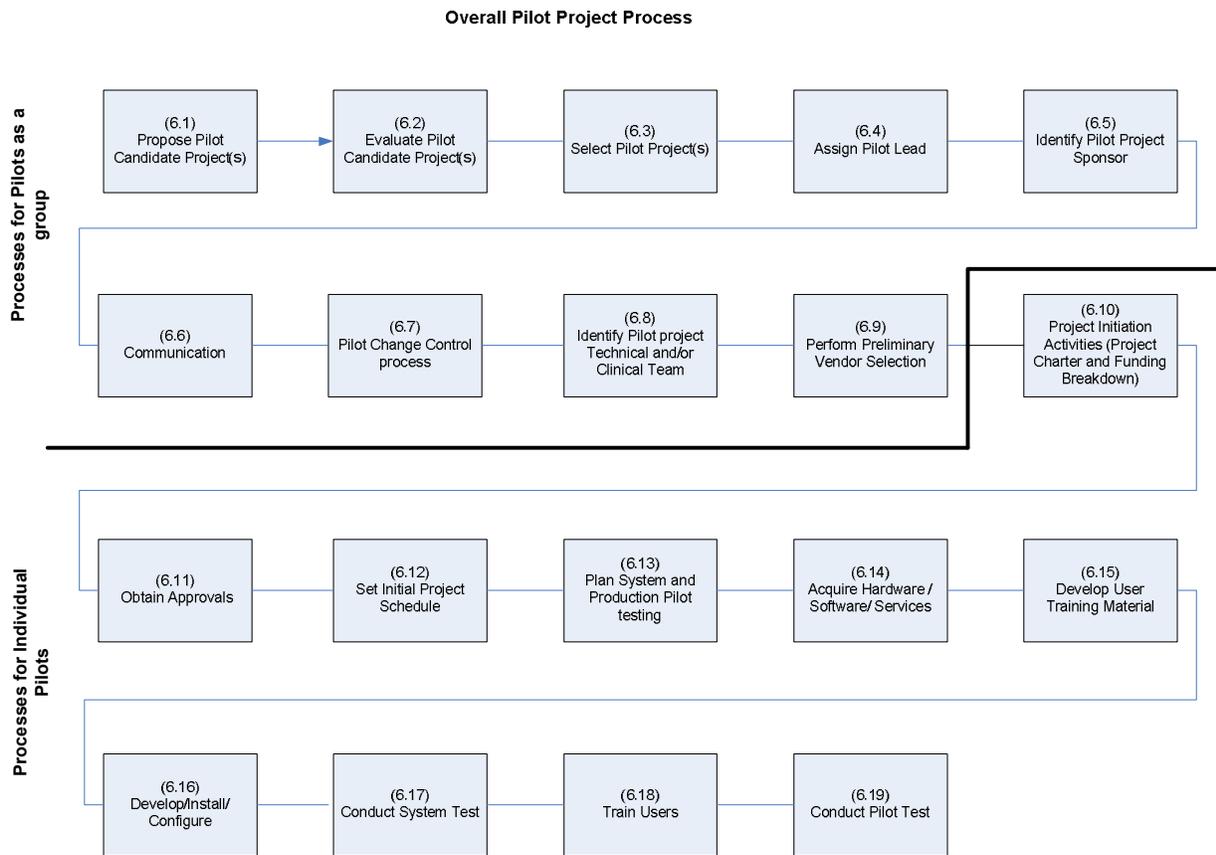


Figure 1 – Overall Pilot Project Process

Pilot process numbering in the figure above corresponds to the process description sections of this document.

5.1 Process Summary - Processes for Pilots as Group

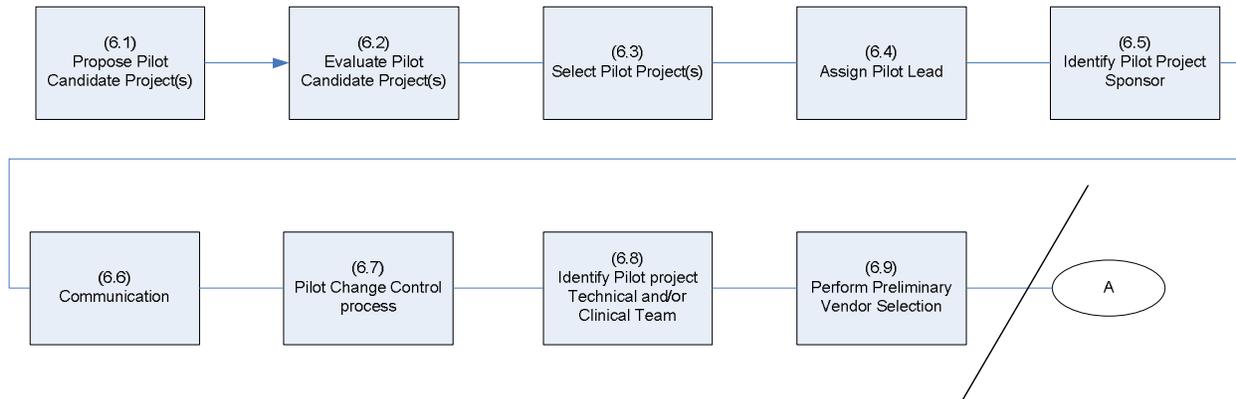


Figure 2 – Processes for Pilots as a Group

Processes for pilots as a group

- Propose pilot candidates
 - Create criteria for selecting potential candidates
 - Explain the requirements each potential individual pilot candidate must meet
- Evaluate pilot candidates
 - Describe evaluation techniques used
 - Describe measures and empirical data expected as a result of the evaluation
- Select individual pilot projects
 - Describe winning pilots and their winning criteria/ measures compared to other candidates
- Assign Pilot leads
 - Teams need to assign a lead to insure key actions can be accomplished
- Identify pilot sponsors
 - These should be champions for the pilot that will defend its importance
 - They should have some business gain as a result of completing the pilot
- Communication
 - Communication of status and issues for internal communication within the team and externally to sponsors and vendors
- Establish Change Control process within the pilots

- For substantial changes, the team needs to review the change description and the impacts before allowing the change to take place
- Identify the technical and user teams
- Perform Vendor selection
 - Determine IPv6 specific requirements
 - Determine VA and Federal requirements (Security, FIPS, SP-800 Series, VA Handbook)
 - For each pilot, identify the vendors whose equipment/service match requirements
 - Attend Vendor's Demo of product
 - Obtain Vendor pricing

5.2 Process Summary - Processes for Individual Pilots

Processes for Individual Pilots

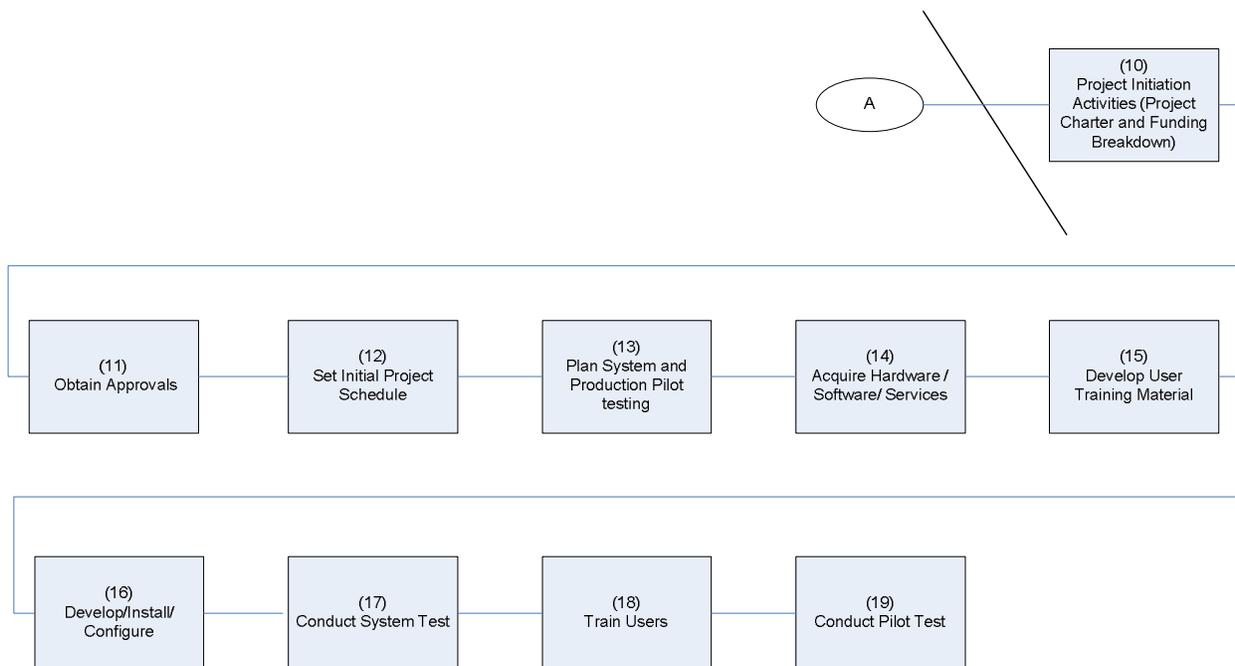


Figure 3 – Processes for Individual Pilots

Steps to manage the individual pilot projects

- Create individual pilot project charter
- Obtain Approvals
- Set initial pilot project schedule
- Create Test plan for system and production pilot tests
- Acquire vendor supplied test devices or services
 - Letters of intent/NDA/purchase orders
- Develop User Training material – (where applicable)
 - If training is not applicable, address why no training will be conducted
- Develop/install/configure
- Conduct system test
- Train Users –(where applicable)
- Conduct production pilot test
 - Execute the pilot for duration
 - Determine next steps – Keep pilot running, Discontinue, gather statistics
 - Report on findings

6 Process Detail

6.1 Propose Pilot Candidates

To ultimately select the pilot(s) that will prove IPv6 functionality for VA, the pilot candidates must be researched for viability and the proposed candidate must be presented to the Transition team for selection. This set of steps will result in a 2-3 page presentation describing what the pilot will prove and the benefits of conducting this test; where it will be located; how it should be implemented; who will be involved in conducting the test and who the potential sponsor and stakeholder will be; when key milestones will occur and the approximate cost. Items that are **Bold** correspond to the evaluation criteria and Rating Scales to be used in the next phase.

Process Name: Propose IPv6 Pilot Candidates				
Task name	Description	Processing Rules		Outputs
		Upon Entry	Upon Exit	
Identify Requirements	Find those existing requirements that IPv6 devices and installations must meet.	Collect Federal directives for data security; E-Gov Compliance, CIO IPv6 network requirements; VA OI&T Budget requirements (if applicable)	Apply to all Candidates	Pass/Fail requirements from Federal, Agency, and project (IPv6) level
Determine Preliminary Measures for Success	Assuming the pilot met all known Federal and IPv6 requirements what would be the measures of success?	Faster response for user; More Data available for user; Greater Customer Satisfaction; Other possible criteria		Measures for success
Align Business Priorities	From VA guidance, determine what, if any, priority should be given to business goals that pilots would be geared toward. (health, housing, other benefits, cost, schedule)	Candidate specific	Apply to all potential candidates	Guidance on business goals, i.e., greater emphasis on Veterans health services. <i>Priorities can be used later in the Evaluation process to</i>

Process Name: Propose IPv6 Pilot Candidates				
Task name	Description	Processing Rules		Outputs
		Upon Entry	Upon Exit	
				<i>break tie in ranking</i>
Describe the pilot candidates business function	Provide a description of what the technology is for this candidate and how it would be used for if successfully implemented. Compile list of equipment/technology needed to carry out the business function	Obtain and Review vendor literature; Business functions will be candidate specific	Understand the product or service and business application in which it would be used at VA. Include list of potential vendors	Two to Three page presentation for each candidate Pilot Description section of Presentation
Determine the geographic location	Determine where the pilot candidate would be carried out. Identify which site, domain or region location will be targeted for pilot deployment. Identify any part of the implementation that would be outside of VA network.	Content is candidate specific	The optimum would be to have several potential locations each pilot candidate could be placed.	List (optimal) or specific location for each candidate Location section of presentation
Determine how the pilot candidate should be implemented	Describe how the pilot would be used. Determine configuration, feature sets to implement (or turn off) for pilot. Describe the functions of the equipment/software and tie them to the business need.	Content is candidate specific	Content is candidate specific	Business Use section of presentation
Determine specific roles to be played for each pilot candidate	Determine who may be needed and the role they would need to play to make the pilot a success. Ex. Veterans with medical condition that pilot addresses; Nurses;	Content is candidate specific	Content is candidate specific	Roles Needed section of presentation

Process Name: Propose IPv6 Pilot Candidates				
Task name	Description	Processing Rules		Outputs
		Upon Entry	Upon Exit	
	Doctors; Software developers; Network Engineers, Network Security.			
Identify Sponsor	Identify an advocate in VA (not within IT) that will have a vested interest in the pilot.	Content is candidate specific		
Identify Stakeholder(s)	Identify an advocate within VA that can commit resources so the project will succeed.	Content is candidate specific		Stakeholder section of presentation
Identify when candidate can be implemented	For evaluation purposes, identify milestones or implementation dates to determine if pilot candidate is viable	Content is candidate specific		Schedule/Milestones section of presentation
Estimate cost of each pilot candidate	Summary estimate of the cost to implement each candidate.	List of equipment to purchase, Qty, price per unit and Total Amount (end user device purchase or rental, network infrastructure, IP carrier services, installation costs, software licenses, head count costs)		Costs section of presentation

6.2 Evaluate Pilot Candidates

Process Name: Evaluate Pilot Candidates				
Task name	Description	Processing Rules		Outputs
		Entry	Exit	
Determine Rating Scale	Develop a common rating scale that can be used to judge the merits of each criterion. (Ex. Scale of 1-5) Determine how to resolve candidate rankings resulting in a tie	7 evaluation criteria were identified in <i>Propose Pilot Candidate</i> process	Rating scale and descriptions of each rating should be simple to allow for easy decision making; Referto Business Priorities for tie breakers	Rating scale with short description of each rating
Schedule Candidate Review	Set up review with Transition Working Group members. The review and nomination of candidates should be completed in one meeting	Create schedule Time and structure Ground rules for the review; Goal is to complete the review and select the candidates in one sitting		Agenda with ground rules and schedule for review
Create candidate rating sheet	Draft a rating sheet with evaluation criteria for judging the merits of each pilot along with the rating scale for use during the review.	Rating scales; 7 criteria		Copies of Rating Sheets for all review participants

6.3 Select Pilot Projects

Process Name: Select Pilot Projects				
Task name	Description	Processing Rules		Outputs
		Entry	Exit	
Conduct Selection Review	Team members from IPv6 PMO and VA meet to present pilot candidates and their evaluation criterion. The team discusses each candidate to determine rating for evaluation criteria	Limit should be determined on number of pilots to be selected; Ranked candidates resulting in a tie should be resolved by weighting responses	Agreement on pilots that met evaluation Insure that all evaluation criteria have been collected and retained for audit purposes	Consolidate Rating sheets collected and record results. Distribute minutes of the review

6.4 Assign Project Lead

Process Name: Assign Pilot Lead process				
Task name	Description	Processing Rules		Outputs
		Entry	Exit	
Choose the lead	The IPv6 Project Management Transition Office solicited volunteers from the Pilot working group to determine the leads for each pilot.			

6.5 Identify Pilot Sponsor

In some proposed pilots there may not be an obvious end user Sponsor. If the purpose of the pilot is to demonstrate functional parity between IPv4 and IPv6 the sponsor would not see any gained benefit. However, the end users should still be involved early on in the planning and execution of the test so they can vouch for parity being demonstrated on the business end. This process will describe steps needed to plan out the sponsor's role and secure their participation.

Process Name: Identify Pilot Sponsor				
Task name	Description	Processing Rules		Outputs
		Entry	Exit	
Define Sponsor's Role	The Sponsor is an end user individual (Doctor, Manager, Clinician) that will be a willing user and hopefully an advocate for the pilot. By participating as a Sponsor they would stand to gain from the success of the Pilot. The role they are to play will need to be defined for each pilot implementation. Uniqueness of each pilot may cause definitions of each sponsor role to be different.	All willing sponsors would need to (1) accept training (if appropriate), (2) agree to use the pilot tools in the course of normal work; (3) provide commentary and feedback	Clear description of Sponsor responsibilities Think of some tangible rewards the sponsor would gain if they participated	Sponsor's role descriptions to be put into memo/email form
Identify Potential Sponsors	Create lists of potential sponsors, contacting them, explaining the pilot and their role , and securing their agreement to participate	Team members to contact users; Use locations where pilots would be implemented	Include willing sponsors email addresses for use in communicating progress	
Secure Sponsor's Agreement		VA Management to negotiate resource sponsorship	Response from a qualified sponsor	Agreement (reply) from sponsor to participate

6.6 Communication

During the course of planning and executing a pilot, communication will be needed internally amongst team members, internally to management and sponsors for status and progress reporting and potentially externally to vendors. To keep both internal and external parties interested and engaged in your progress, this process will establish how you plan to communicate.

Process Name: Communication				
Task name	Description	Processing Rules		Outputs
		Entry	Exit	
Establish Internal team communication	Depending on the Pilot, there may be a need for daily interaction; (daily ½ hr calls, Bi-monthly updates, Monthly updates). The result of this step should be a format for those interactions. Discuss with the team what works best.	Meeting agenda; schedule for each type of interaction, action items, items for escalation (if needed), next steps	Selection by the team as to the best consistent method for internal communication	Agenda and meeting minutes format for the team. Timing and schedule for status communication
Establish Sponsor and Management communication	Determine a format and reporting time period that will keep management and sponsors informed on <ul style="list-style-type: none"> • Accomplishments • Next Steps • Issues and escalations • Assistance needed (if any) 	Accomplishments, milestones met, issues, assistance needed, next steps Weekly or bi-weekly Management and sponsor input	Reporting preference	Format and timing for Management and sponsor bulletins

6.7 Pilot Change Control Process

Once each individual pilot project has been selected it will have unique content and factors affecting its outcome. However, within each pilot, there should be a common process controlling changes to minimize their impact. That common process will serve to document, review, apply controls and disposition changes before they are made. The goal of this process is to insure the change is fully understood by all impacted parties before it is made. The process is used to manage “Material Change”. This process is the responsibility of the Pilot Lead. They can delegate it but need to document the change and follow the process.

Definition: A material change is one where if it was carried out, would have significant impact on any one or combination of the following project areas:

- Functions planned based on initial pilot selection
- Contractual/legal
- Design
- Testing
- Training
- Implementation/Operating environment
- Post implementation support
- Overall schedule

Process Name: Pilot Change Control Process				
Task name	Description	Processing Rules		Outputs
		Entry	Exit	
Determine if the change is Material	Use the criteria listed above to determine material impacts.		If the change does not affect any of the above areas, it is not deemed to be a Material change. If it DOES affect then proceed on to write up the change.	Material change needing review and approval – or – low level change that can be acted on.

Process Name: Pilot Change Control Process				
Task name	Description	Processing Rules		Outputs
		Entry	Exit	
Describe the proposed change	Describe the nature of the change and the reasoning for making it. For each of the potential impacts areas listed above describe what, if any impact you have determined. Also, for each impacted area, list the mitigation factors that can be used to minimize impact. If it's going to cost more, include the new costs. If it will take longer, provide the new suggested schedule		Insure all project areas are addressed with either a description or N/A	Documented change ready for review
Conduct review	Send the description out for review. All members of the team including stakeholders and sponsors must agree that the change is important enough to support. The Stakeholder, sponsor and pilot lead must agree in writing that the change is worth proceeding with. The email becomes part of the pilot documentation	Documented change; Individual Pilot team members, sponsors, stakeholders		Approval email from Stakeholder, Sponsor and Pilot lead.

6.8 Identify Pilot Project Technical and/or Clinical Teams

Because of the unique implementations and locations, each pilot will have different requirements for clinical team members. The pilot team will need to work with the sponsor to determine skill sets needed.

Process Name: Identify Pilot Project Technical and/or Clinical Team				
Task name	Description	Processing Rules		Outputs
		Entry	Exit	
Determine Clinical Team for Pilot	Working with the user group sponsor from the clinician side, discuss which clinical staff should be on the team.			
Determine Technical team for pilot	Based on the planned implementation, and functions involved with the test, the pilot lead will need to assemble their team and define the roles and responsibilities They would work with the VA stakeholder that can approved the project and can commit needed resources	Based on unique pilot needs: <ul style="list-style-type: none"> • Business unit knowledge • Pilot specific equipment knowledge • VA Network knowledge and access based on location (VSN) • Software application development 		

6.9 Preliminary Vendor Selection process

Process Name: Perform Preliminary Vendor Selection				
Task name	Description	Processing Rules		Outputs
		Entry	Exit	
Interview Vendors	Validate service offerings and/or products for compatibility with IPv6 requirements	List of vendors from process step; <i>Propose IPv6 Pilot Candidates</i>	(1)Potential Vendors that meet IPv6 functional and parity requirements; (2)Detailed functional and technical IPv6 specifications; (3)Potential Vendors that DONT meet IPv6 functional requirements	Acceptable vendors; Unacceptable vendors
Determine service or product acquisition terms	Is there is a minimum number units required by the vendor; Are there return allowances, Is there specialized installation required by the vendor that they carry out; Are there any configuration restrictions, training and support provisions, maintenance provisions	Content is Pilot specific	Content is Pilot specific	Summary of Costs and terms expected
Obtain Product usage references	Get a list of other customers that use the product/service and determine the configuration and number of	Content is Pilot specific	Obtain comments	List of references contacted and comments

Process Name: Perform Preliminary Vendor Selection				
Task name	Description	Processing Rules		Outputs
		Entry	Exit	
	installations/licenses for compatibility and scalability. Determine if customers can be contacted for their comments; <i>We need this step regardless of whether or not VA is currently using a particular vendor under evaluation</i>			
Arrange for Demonstrations	Particularly if references are not available, can the product or service be demonstrated?	Site visit to vendor location/lab		Findings report describing demo results
Draft Competitive Analysis	Write a summary analysis comparing the pros and cons of each vendor. Analysis should include an assessment of each vendors technical, management, delivery capabilities, experience, and price	Use 7 criteria from <i>Propose IPv6 Pilot Candidates</i> ; Comments on Vendor technical management, delivery capability, product experience with other customers and pricing		Competitive analysis

6.10 Pilot Project Charter Process

The Pilot Charter is a formalized proposal explaining the purpose of the project and what the expected results are to be. It also explains how the Pilot will be governed, organized, managed, and controlled. It gives managers a digest of the project for them to approve further action and to approve budget purchases for project. Once approved, along with the schedule and test steps, it will be the main guide to successfully completing the pilot.

Process Name: Pilot Project Charter				
Task name	Description	Processing Rules		Outputs
		Entry	Exit	
Overview	Describe the selection process for choosing pilots and end with the reasons this one was chosen	Use the 7 Evaluation criteria from <i>Propose Pilot Candidate process</i>		Overview section
Business Need for pilot and benefits	Very clearly state what IPv6 function(s) will be exercised and business unit benefits the pilot will demonstrate	Use information collected from the Pilot Selection process	Contents are Pilot specific	Business Need section
Scope of the pilot	Briefly describe the planned implementation and all the parts needed to prove how the IPv6 pilot will be implemented in a Site, Domain or Region Location, i.e., pilot implemented in a patients home in the Cleveland area so that VA end point is within Stokes Hospital. Provide information on how sponsors and their resources will be involved.	Use description created from <i>Propose Pilot Candidate process</i> .	Contents are Pilot specific	Scope Section

Process Name: Pilot Project Charter				
Task name	Description	Processing Rules		Outputs
		Entry	Exit	
Testing Approach	Describe the types of testing to be conducted (For example, System to be tested before deployment to users. Team to conduct a controlled implementation)	Contents are Pilot specific	Contents are Pilot specific	
Risks, Constraints and Challenges	List all technical and project risks known and how you are planning to mitigate them. List constraints that would hamper the project	Contents are Pilot specific	Contents are Pilot specific	
Project Mgmt and Critical Success Factors	Describe the critical success factors for this individual pilot to be successful.	Contents are Pilot specific	Contents are Pilot specific	
Roles And Responsibilities	Describe the different roles to be played by all participants, especially the sponsor and the end users. Estimate the amount of time needed by the sponsor and users to be trained and time estimated to conduct the pilot.	Contents are Pilot specific	Contents are Pilot specific	
Costs	Describe the costs information accumulated in <i>Perform Vendor Selection</i> process. If the pilot is not separately budgeted provide a description of how purchases for equipment/software will be submitted and need to be approved	Contents are Pilot specific	List of costs needs to include: <ul style="list-style-type: none"> • Manpower • Equipment • Services (ISP) 	List of costs

6.11 Obtain Approvals

The process of Obtaining Approvals is an umbrella milestone where several approvals are collected before significant work on a pilot is done. All approvals can be obtained electronically via email and stored for audit purposes.

Process Name: Obtain Approvals				
Task name	Description	Processing Rules		Outputs
		Entry	Exit	
Obtain Operations Infrastructure and Telecom Approval	The Director in OI&T or Chief Information Officer (CIO) must sign off on the pilot charter and approve the work to proceed.	Pilot Project Charter		Email approval of the individual Pilot Charter from Director of OI&T authorizing the work on the pilot to proceed.
Obtain Funding Approval	The project Charter must be approved and funding made available. If the pilot has not been previously budgeted, funding will need to be approved.	Project Charter and breakdown of funding it contains		Email approval of funding for the individual pilot
Obtain Enterprise Security Change Control Board (ESCCB) Approval	All network changes introduced to VA production environments must be reviewed and approved by the Enterprise Security Change Control Board (ESCCB) prior to being implemented. This process description is not a replacement for preparing for ESCCB approval but a reference to an existing process IPv6 pilots must follow.	ESCCB submission form		

6.12 Set Initial Project Schedule

Once pilot charters have been approved by the stakeholders and management within OI&T, the next step is to complete an initial schedule for the team to follow. Since each pilot will have significantly different needs, the following description will provide the basic schedule milestones to be provided.

Process Name: Set Initial Project Schedule				
Task name	Description	Processing Rules		Outputs
		Entry	Exit	
Finalize Vendor Selection	Set milestones for arriving at the final choice for vendor	Use competitive analysis from <i>Preliminary Vendor Selection</i>		
Create Test Plan	Set milestones for completing and reviewing draft and final versions and subsequent approval of the test plan			
Acquire Hardware/ software/ services	Set milestones for completing purchase requests and obtaining equipment/ services			
Develop Training Material	Set milestones for completing and reviewing draft and final versions of training as necessary			
Develop software/ install equipment/ configure applications	Set milestones for completing equipment installation, software development, and application configurations.			
Obtain security approval	Set milestone for completing requests for ESCCB approval and obtaining approval			
Conduct system test	Set milestones for beginning system testing; resolving known defects and retesting			
Train Users	Set milestones for conducting training;			

Process Name: Set Initial Project Schedule				
Task name	Description	Processing Rules		Outputs
		Entry	Exit	
	obtain feedback on the training			
Conduct pilot test	Set milestones for start of testing; collect defects or issues; provide resolutions or fixes; retest			
Wrap up testing	Set milestones for obtaining Feedback from sponsors and completing lessons learned and next steps recommendations			

6.13 Plan System and Production Pilot Test

The successful completion of the system test of the pilot is intended to be the technical team's confirmation that it ready to introduce to the users. The production pilot test is where the end users interact with the system. This process describes the steps needed to plan both tests. The final output is a plan that can be reviewed by the team, sponsors and stakeholders. The plan should be approved by the sponsors and stakeholders before proceeding with the test.

Process Name: Plan System and Production Pilot Testing				
Task name	Description	Processing Rules		Outputs
		Entry	Exit	
Create test plan	Create a description of how testing will be conducted. The following process steps list required sections.			
<ul style="list-style-type: none"> Describe System Test 	Describe the scope of testing of the system test. Include the purpose of the test and the outer boundaries of what will and will not be tested.			
<ul style="list-style-type: none"> Describe production pilot test 	Describe the minimum tests you require that the users complete. There should be a minimum suite of production scenarios the users should execute to prove usability and functional performance that result in a good outcome. There should also be a minimum suite of conditions that result in error outcomes.			
<ul style="list-style-type: none"> Describe how defects or issues will be 	Describe how defects will be managed and how testing progress will be reported. List or describe tools (manual or vendor supplied) to be used to capture and report on test defects.			

Process Name: Plan System and Production Pilot Testing				
Task name	Description	Processing Rules		Outputs
		Entry	Exit	
managed				
<ul style="list-style-type: none"> Describe test progress and defect reporting 	For both the system test and the production pilot test there must be a description of how progress of testing and defect reporting will be done. (Ex. # users testing, # of tests planned, # of tests completed, # of defects found, # of defects fixed, # defects deferred, etc.)			
Identify Test Subject (Clinician and veteran)	Based on your knowledge of the functions involved and the implementation planned, describe qualifications of the ideal user candidates. (Similar to writing a job description.			To be used by Sponsor or clinician in selecting resources.

6.14 Acquire Hardware/ Software/ Services

Process Name: Acquire Hardware / Software/ Services				
Task name	Description	Processing Rules		Outputs
		Entry	Exit	
Buy equipment / software needed	This is not a replacement process but a milestone. VA would use its current process for procuring needed equipment.			

6.15 Develop User Training Material

Because of the nature of the individual pilots there may be a need to develop training materials for end users and in a subsequent process step training would need to be conducted. In some pilots, the material on how to use new equipment can be provided by the vendor. However, if the pilot is introducing a software application or unique configuration using vendor's equipment, then this process step will be needed. This is not intended to be the creation of the final production users training materials.

Process Name: Develop User Training Material				
Task name	Description	Processing Rules		Outputs
		Entry	Exit	
Document Major functional areas	Provide users with screen prints of major functional paths.	Content is Pilot specific	Content is Pilot specific	Screen prints and functional descriptions
Document error scenarios, messages and corrective actions	Provide users with known errors they may encounter and what the errors mean. For each scenario, provide corrective steps they can take to eliminate the error and proceed and avoid the error in the future	Content is Pilot specific	Content is Pilot specific	Descriptions of error scenarios and corrective steps.
Describe Minimum information for troubleshooting	If users encounter unexpected error conditions, they will need to provide a minimum of information needed to diagnose the problem. Describe your minimum information requirements for troubleshooting. (Ex. Error message numbers, equipment model numbers or software version numbers, error message screen text wording, capture screen shots if the capability exists)	Content is Pilot specific	Content is Pilot specific	

6.16 Develop/ Install/ Configure Process

In this process, the team is actively installing new equipment or software for purpose of the pilot, configuring that equipment and/or software to work according to IPv6 Dual stack standards and building software applications to work in the pilot production environment.

Process Name: Develop/ Install/ Configure				
Task name	Description	Processing Rules		Outputs
		Entry	Exit	
Install	Install any acquired hardware / software in the pilot test environment.	Content is Pilot specific	Content is Pilot specific	
Develop	Develop needed application software	Content is Pilot specific	Content is Pilot specific	
Configure	Plan the correct configuration changes needed for equipment	Content is Pilot specific	Content is Pilot specific	

6.17 Conduct System Test

So that users get the most use out of the system and do not encounter basic errors, the system should be put through a system test. By selecting a handful of “sunny day” scenarios where there is a predictable outcome, the pilot team can maximize the users time and training.

Process Name: Conduct System Test				
Task name	Description	Processing Rules		Outputs
		Entry	Exit	
Conduct Shakeout of application	Once all equipment components are installed, software developed and installed, and the system configured, the shakeout test will confirm that connections are completed and sending data back and forth	Completion of Develop/ Install/ Configure steps		
Conduct Functional system test	Use the test approach described in the Test Plan to draft scripted test actions. Record and correct errors. Document and changes or gaps in functionality discovered. Create System test results report	Content from the <i>System and Production Pilot Test Plan</i>	System test results report	

6.18 Train Users

For Pilots that will have an interface to users and expected interaction with users, those users will need to be trained. For Pilots with no user interface, this process does not apply. The input for this would be the material created in the Develop User Training Material process.

Process Name: Train Pilot Users				
Task name	Description	Processing Rules		Outputs
		Entry	Exit	
Determine the number of users involved		Coordination with Sponsor	Content is Pilot Specific	
Create a user feedback sheet	Users should be able to comment on the training they were given. The comments can be used to improve training when the full production rollout is planned.	Content is Pilot Specific	Content is Pilot Specific	Training Comment Sheet
Schedule and deliver training		Content is Pilot Specific	Content is Pilot Specific	

6.19 Conduct Pilot Test

Process Name: Conduct Production Pilot				
Task name	Description	Processing Rules		Outputs
		Entry	Exit	
Execute pilot test				
Document issues and Successes	Document all the issues users and technical teams found. Also record all the positive feedback from Sponsor and clinical teams			
Determine Pass Fail Status	Based on requirements and evaluation criteria, determine if the pilot exercise passed or failed. Show the criteria and the score for each criterion.	Functional requirements, 7 evaluation criteria, IPv6 Transition plan Test approach criteria		
Determine next steps	Determine if the pilot should continue or be dismantled. Service contracts with ISP providers may mandate that the pilot be brought down once it is completed. If software was developed internally and the software must be archived, describe how the application and all its associated documentation and source be archived. If vendor features need to be corrected, prepare findings reports for vendor			
Compile project closeout report	Assemble all findings and recommendations			Project Close out document
Obtain OI&T /CIO Approval of Close-out				

Appendix A – Acronyms/Abbreviations List

CIO	Chief Information Officer
CM	Change Management
EA	Enterprise Architecture
ESCCB	Enterprise Security Change Control Board
EUD	End User Devices
IP	Internet Protocol
IPv4	Internet Protocol version 4
IPv6	Internet Protocol version 6
ISP	Internet Service Provider
IT	Information Technology
LAN	Local Area Network
OI&T	Office of Information and Technology
OMB	Office of Management and Budget
PM	Program Manager/ Project Manager
ROI	Return on Investment
VA	Department of Veterans Affairs
VACO	Veterans Affairs Central Office
VBA	Veterans Benefits Administration
VHA	Veterans Health Administration
VISN	Veterans Integrated Service Networks