

ORDER FOR SUPPLIES OR SERVICES

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER 03/27/2009		2. CONTRACT NO. (If any) GS-35F-0605S		6. SHIP TO: Louis Effa		
3. ORDER NO. DTMA1F09042		4. REQUISITION/REFERENCE NO. See Lines		a. NAME OF CONSIGNEE DOT/Maritime Administration, MAR-340		
5. ISSUING OFFICE (Address correspondence to) DOT/Maritime Administration, MAR-380 1200 New Jersey Ave SE, MAR380 W26-429				b. STREET ADDRESS 1200 New Jersey Ave., SE MAR340, W26-320		
Washington DC		20590		c. CITY Washington	d. STATE DC	e. ZIP CODE 20590-0001
7. TO:				f. SHIP VIA		
a. NAME OF CONTRACTOR Fred Spence, 985-781-9800				8. TYPE OF ORDER		
b. COMPANY NAME APPLIED ENTERPRISE SOLUTIONS, LLC				<input checked="" type="checkbox"/> a. PURCHASE		b. DELIVERY - Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.
c. STREET ADDRESS 109 SHIRMAC DR				REFERENCE YOUR:		
d. CITY SLIDELL				Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.		
e. STATE LA		f. ZIP CODE 70461-2901		9. ACCOUNTING AND APPROPRIATION DATA See Line Item Detail		
10. REQUISITIONING OFFICE DOT/Maritime Administration, MAR-340				11. BUSINESS CLASSIFICATION (Check appropriate box(es))		
<input checked="" type="checkbox"/> a. SMALL <input type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> g. SERVICE-DISABLED VETERAN-OWNED <input checked="" type="checkbox"/> d. WOMEN-OWNED <input type="checkbox"/> e. HUBZone <input type="checkbox"/> f. EMERGING SMALL BUSINESS				12. F.O.B. POINT Destination		
13. PLACE OF		14. GOVERNMENT B/L NO.		15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date)		16. DISCOUNT TERMS
a. INSPECTION Destination	b. ACCEPTANCE Destination					

17. SCHEDULE (See reverse for Rejections)

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	SEE LINE ITEM DETAIL					

SEE BILLING INSTRUCTIONS ON REVERSE	18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		17(h) TOT. (Cont. pages)
	21. MAIL INVOICE TO: Tammy Curnett						
	a. NAME DOT/ Enterprise Services Center (ESC) OFO/FAA, Oklahoma City						
	b. STREET ADDRESS (or P.O. Box) MARAD A/P Branch, AMZ-150 PO Box 25710						
c. CITY Oklahoma City			d. STATE OK	e. ZIP CODE 73125		\$338,981.70	17(i) GRAND TOTAL

22. UNITED STATES OF AMERICA BY (Signature) 

23. NAME (Typed)
Alfredia Rich-Murphy
TITLE: CONTRACTING/ORDERING OFFICER

**ORDER FOR SUPPLIES OR SERVICES
SCHEDULE - CONTINUATION**

PAGE NO.
3 of 10

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER 03/27/2009	CONTRACT NO. GS-35F-0605S	ORDER NO. DTMA1F09042
-----------------------------	------------------------------	--------------------------

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)				
0001	<p>Stennis Support</p> <p>The Contractor shall supply one (1) Enterprise Architect and one (1) System Architect/Engineer to provide System and Enterprise architecture Support to the US DOT Maritime Administration from March 27, 2008 through September 30, 2009. The physical address for the National Center for Critical Information Processing and Storage (NCCIPS) is:</p> <p>Department of Transportation/NCCIPS 9325 Cypress Loop Road Stennis Space Center, MS 39529</p> <p>NOTE: 1. Please see Section C for detailed Statement of Work, Description and Specifications. 2. See Section H for eleven (11) page Quality Assurance Surveillance Plan (QASP).</p> <p>Working Hours: The contractor shall work a core eight (8) hour per day (8:00 AM - 5:00 PM) and shall respond to trouble calls within a 2 hour time period outside of the core working hours.</p> <p>Labor Category:</p> <p>Senior Software Engineer at hourly rate of \$93.70 Senior Systems Consultant at hourly rate of \$148.13</p> <p>The Labor Categories in this Order are of a professional nature and are therefore, exempted from Overtime (OT) pay.</p> <p>Hourly Rates include the 0.75% Industrial Funding Fee</p> <p>Hourly Rates are the same for both Ordering Activity Site and Contractor Site.</p> <p>Travel is not authorized without prior approval from Contracting Officer.</p> <table border="0"> <tr> <td><i>Start Date</i></td> <td><i>End Date</i></td> </tr> <tr> <td>03/27/2009</td> <td>09/30/2009</td> </tr> </table> <p>Reference Requisition: PR300090059</p> <p>Funding Information: 2009 - - 91750 - HQ 1IT - E0 - 0030 - 0 - 0000 - 134009 - - - - 26960 - 6100 - 6600 - \$210,037.20</p>	<i>Start Date</i>	<i>End Date</i>	03/27/2009	09/30/2009	1.00	EA	210,037.200	210,037.20	
<i>Start Date</i>	<i>End Date</i>									
03/27/2009	09/30/2009									

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17i) ⇒ \$210,037.20

**ORDER FOR SUPPLIES OR SERVICES
SCHEDULE - CONTINUATION**

PAGE NO.
4 of 10

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER 03/27/2009	CONTRACT NO. GS-35F-0605S	ORDER NO. DTMA1F09042
-----------------------------	------------------------------	--------------------------

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
0002	<p>AES Contract</p> <p>Obligate funding for AES contract for Stennis network support (RRF)</p> <p align="center"><i>Start Date</i> <i>End Date</i> 03/27/2009 09/30/2009</p> <p>Reference Requisition: PR300090033</p> <p>Funding Information: 2009 - - X4303 - 965 - 70 - ADP0 - 0 - 0000 - 00000 - 70 - 0961304A 70 - RMS0 - 25704 - 6100 - 6600 - \$73,009.00</p>	1.00	EA	73,009.000	73,009.00	
0003	<p>AES Contract</p> <p>Obligate funding for AES Contract for Stennis network Support (RRF).</p> <p align="center"><i>Start Date</i> <i>End Date</i> 03/27/2009 09/30/2009</p> <p>Reference Requisition: PR300090058</p> <p>Funding Information: 2009 - - 91750 - HQ 1IT - E0 - 0030 - 0 - 0000 - 134009 - - - - 26960 - 6100 - 6600 - N96149 \$55,935.50</p>	1.00	EA	55,935.500	55,935.50	

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17i) ➡ \$128,944.50

	Document No. DTMA1F09042	Document Title Stennis Support	Page 5 of 10
--	------------------------------------	--	--------------

TABLE OF CONTENTS

SECTION C -- Descriptions and Specifications	6
C.1 Scope of Work	6
SECTION G -- Contract Administration Data	8
G.1 Contracting Officer Technical Representative (COTR)	8
SECTION H -- Special Contract Requirements	9
H.1 Quality Assurance Surveillance Plan	9
SECTION I -- Contract Clauses	10
I.1 Contracting Officer's Technical Representative	10

	Document No. DTMA1F09042	Document Title Stennis Support	Page 6 of 10
--	------------------------------------	--	--------------

SECTION C -- DESCRIPTIONS AND SPECIFICATIONS

C.1 SCOPE OF WORK

System and Enterprise Architecture Support

1. Enterprise Architect

1.a Scope

The US DOT MARAD Enterprise Architecture (EA) shall provide common methodologies and practices for Information Technology aligning resources to improve business performance assisting the agency achieve their core missions. The US DOT MARAD EA must describe the current and future state of the agency, and lay out a plan for transitioning from the current state to the desired future state while ensuring that DOT, MARAD and Federal Enterprise Architecture (FEA) policies and IT implementations are aligned with the agency goals.

1.b Statement of Work

The US DOT MARAD EA is a key driver of MARAD's EA functions, leading efforts to achieve consensus on, publicized, and enforced compliance with the agency policies, practices, processes, standards, certified IT components, and procedures. The US DOT MARAD EA shall:

- a. Plan EA projects and tasks
- b. Lead the EA team
- c. Communicate EA policies to MARAD functional groups
- d. Play an active role in the defining, communicating and implementing FEA policies
- e. Interact with MARAD and other Federal Agencies to ensure EA policies are valid and of best practice
- f. Provide insight and input into the MARAD information technology strategic plan,
- g. Serve as a senior consultant and directly report all EA activities to the CIO
- h. Serve in a consultant role to other Directors and other managers within MARAD as directed by the CIO
- i. Adhere to the FEA Reference Models to develop a common taxonomy and ontology for defining IT resources
 - o Performance Reference Model
 - o Business Reference Model
 - o Service Component Reference Model
 - o Data Reference Model
 - o Technical Reference Model
- j. The overarching duty of the US DOT MARAD EA is to provide the agency with a roadmap to the ease of data sharing information and resources across federal agencies, reduce costs, and improve citizen services.
- k. It is further the duty of the US DOT MARAD EA to fully adhere to the US Office of Management and Budget (OMB) policies and comply with the Clinger-Cohen Act

2. System Architect/Engineer

2.a Scope

The scope of the US DOT MARAD System Architect/Engineer includes knowledge of large client/server based applications as well as knowledge is SAN, WAN and LAN technologies. The primary role of the US DOT MARAD System Architect/Engineer is to fully manage and support the MARAD systems at the primary datacenter at the National Center for Critical Information Processing and Storage (NCCIPS). The US DOT MARAD System Architect/Engineer shall lead and assist MARAD and other support teams in defining the system architecture, environment and implementation details as it pertains to the unique datacenter environment at NCCIPS. In addition, the US DOT MARAD System Architect/Engineer shall perform day-to-day or routine duties such as patching, spot-checking of the environment, scripting and hardware and software maintenance.

2.b Statement of Work

	Document No. DTMA1F09042	Document Title Stennis Support	Page 7 of 10
--	------------------------------------	--	--------------

The US DOT MARAD System Architect/Engineer plays a primary role in the overall operation of all MARAD systems and supporting systems and will operate as the focal point for the MARAD operations at the NCCIPS datacenter. The US DOT MARAD System Architect/Engineer shall:

- a. Support the operation and maintenance of all MARAD server housed at the NCCIPS datacenter
- b. Troubleshoot, diagnose and resolve server-related equipment problems to ensure functional operation
- c. Perform and or coordinate back-up procedures and coordinate restoration and retrieval of files as needed as well as maintain all files in an accurate and efficient manner for all MARAD server housed at NCCIPS.
- d. Coordinate and install cards, drives, tapes, memory, peripheral equipment and software for all MARAD server housed at NCCIPS
- e. Verify hardware and software purchase requests for all MARAD server housed at NCCIPS
- f. Conduct studies pertaining to development of new information systems to meet current and projected needs
- g. Study existing information processing systems to evaluate effectiveness and develop specifications for new systems or prototype systems to improve production or workflow as required
- h. Prepare workflow charts and diagrams to specify, in detail, operations to be performed by equipment and computer programs for all MARAD server housed at NCCIPS
- i. Upgrade computer application system software and troubleshoot errors to maintain system after implementation for all MARAD server housed at NCCIPS
- j. Perform system administration duties including setting up and monitoring server back-up processes, adding new users, modifying user/group profiles, and monitoring and tuning server and system resources for all MARAD server housed at NCCIPS
- k. Evaluate, install, test, and implement new servers, server operating systems and application software packages; install new versions, releases or maintenance levels of existing server operating systems and related components for all MARAD server housed at NCCIPS
- l. Assist in maintaining network components, including routers, bridges, hubs, multiplexors and smart switches for all MARAD server housed at NCCIPS
- m. Perform preventive maintenance to preclude major network outages or degradation to customer service for all MARAD server housed at NCCIPS
- n. Negotiate and manage vendor contract for information technology services for all MARAD server housed at NCCIPS

	Document No. DTMA1F09042	Document Title Stennis Support	Page 8 of 10
--	------------------------------------	--	--------------

SECTION G -- CONTRACT ADMINISTRATION DATA

G.1 CONTRACTING OFFICER TECHNICAL REPRESENTATIVE (COTR)

Louis Effa, Office of Information Technology @ 202-366-9727 or louis.ffa@dot.gov shall be COTR.

The contractor shall direct all questions of a technical nature to the COTR.

	Document No. DTMA1F09042	Document Title Stennis Support	Page 9 of 10
--	------------------------------------	--	--------------

SECTION H -- SPECIAL CONTRACT REQUIREMENTS

H.1 QUALITY ASSURANCE SURVEILLANCE PLAN

Please see the attached eleven (11) page Quality Assurance Surveillance Plan (QASP).

	Document No. DTMA1F09042	Document Title Stennis Support	Page 10 of 10
--	------------------------------------	--	---------------

SECTION I -- CONTRACT CLAUSES

I.1 1252.242- CONTRACTING OFFICER'S TECHNICAL OCTOBER 1994
73 REPRESENTATIVE

(a) The Contracting Officer may designate Government personnel to act as the Contracting Officer's Technical Representative (COTR) to perform functions under the contract such as review and/or inspection and acceptance of supplies, services, including construction, and other functions of a technical nature. The Contracting Officer will provide a written notice of such designation to the Contractor within five working days after contract award or for construction, not less than five working days prior to giving the contractor the notice to proceed. The designation letter will set forth the authorities and limitations of the COTR under the contract.

(b) The Contracting Officer cannot authorize the COTR or any other representative to sign documents (i.e., contracts, contract modifications, etc.) that require the signature of the Contracting Officer.

MarView

Quality Assurance and Surveillance Plan

March 18, 2009

MarView Quality Assurance and Surveillance Plan

Table of Contents

Introduction	1
Purpose	1
Policy Statement.....	1
Scope	2
Management	2
Organizational Structure	2
Roles and Responsibilities	2
Senior Management.....	3
MarView Project Leaders.....	3
Quality Assurance Team	3
Technical Staff	3
Required Documentation	4
Quality Assurance Procedures	4
Review Process.....	5
Review Procedures	5
Audit Process.....	6
Audit Procedures	6
Evaluation Process	7
Process Improvement.....	7
Problem Reporting Procedures	8
Noncompliance Reporting Procedures	8
Quality Assurance Metrics.....	8
Appendix - Quality Assurance Check Lists Forms	10
Quality Assurance Management Plan	10
Quality Assurance Configuration Management	10
Quality Assurance Network Management Required Documentation.....	10
Quality Assurance Network Management	11
Quality Assurance Network Management Equipment Moves.....	11
Quality Assurance Computer Support Help Desk	11

MarView Quality Assurance and Surveillance Plan

Introduction

The MarView quality team will consist of a personnel with relevant expertise to ensure performance on this contract. This team will perform a variety of activities to support the application environment for the MarView program. In order to provide high quality products and services, each support team will adhere to processes, procedures and standards. Quality Assurance (QA) is a process used to monitor and evaluate the adherence to processes, procedures, and standards to determine potential product and service quality. It involves reviewing and auditing the products and activities to verify that they comply with the applicable contracts, procedures and standards, and assuring the appropriate visibility for the results of the reviews and audits.

Purpose

This MarView Quality Assurance and Surveillance Plan (QAP) describes the standards, processes and procedures used to support the consistent delivery of high-quality, professional products and services provided in the support of an automated environment. The quality assurance process is concerned with establishing the authority of the QA function, quality assurance standards, procedures, policies, and monitoring, and evaluation processes to determine quality in relation to established standards. QA provides standards against which the quality of the product/service being provided and the progress toward completion can be measured. Quality assurance activities concentrate on the prevention of problems through the continuous improvement of processes.

Policy Statement

All MarView activity is required to include QA activities as an integral part of processes used for the development and delivery of products/services. This policy requires that:

1. Quality Assurance goals must be rational so that they are accepted and supported.
2. Continual improvement efforts must be supported.
3. All quality control and quality measurement activities are documented.
4. A manager will be designated to be responsible for Quality Assurance.
5. The MarView Quality Assurance and Surveillance Plan will be base-lined and placed under Configuration Management control.
6. Quality Assurance will work to foster constructive communication, provide feedback to detect and prevent development problems, control risks, discuss alternative solutions, and ensure quality is built-in to all products/and IT services to the customer.

MarView Quality Assurance and Surveillance Plan

Scope

The scope of this plan covers the MarView activity for application development, network and data center activities, help desk and support. This model discusses the following QA topics:

- Organizational structure
- Documentation required
- Procedures to be enforced
- Audits and reviews to be conducted
- Process improvement
- Problem reporting and resolution
- Quality Assurance metrics

The MarView activities that will be reviewed by QA activities are:

- MarView program planning
- Network Administration/Operations
- Computer Support
- Problem Tracking and Reporting
- Hardware/Software Configuration Management
- Training
- Help Desk

Management

Organizational Structure

The QA function will be a separate entity and will maintain independence from the individual MarView program functions by possessing a direct reporting function to the MarView management. This structure will protect the QA team's independence and objectivity concerning the assurance of high-quality, professional products and services. This team is responsible for the development of the MarView QAP that will be used to identify the roles and responsibilities of the QA team.

Roles and Responsibilities

The role of the MarView QA team is to assist the technical staff in continually improving the quality of their work products and services. The QA team is responsible for establishing processes and procedures that accurately verify and validate the adherence of computer support, Help Desk and network activities to applicable standards, guidelines, and procedures.

The MarView QA team will be involved throughout the life of the program. They will participate in the development of the MarView Program Management Plan (PMP), also

MarView Quality Assurance and Surveillance Plan

Transition Plans to establish their function within the project and to provide input into the project's schedule and work breakdown structure (WBS). To ensure that QA activities are identified and that time is allotted for QA activities. Funding for the QA team members will be planned within the task hours and cost structure.

The organizational responsibilities as they relate to QA are:

Senior Management

- Provides management support, supervision, and oversight for the QA function
- Ensures the independence of the QA function
- Makes available staff and other resources as needed to support QA
- Ensures resolution of problem and concern issues
- Reviews QA audits and reports

MarView Project Leaders

- Manage individual MarView project performance
- Ensure QA activities are conducted
- Ensure compliance with the QA program contracts
- Ensure responses to deficiency reports from QA reviews and audits

Quality Assurance Team

- Develops and maintains the Quality Assurance and Surveillance Plan
- Conducts audits and reviews
- Ensures work products adhere to the appropriate standard
- Develops audit and review procedures for MarView activities
- Ensures the QA processes and procedures adequately control project quality
- Ensures the QA activities accurately measure the product, service and process quality
- Reviews and approves specified deliverables for release to customers
- Promptly reports results of audits to the project task leader
- Periodically reports unresolved noncompliant items to senior management
- Maintains an on-going dialogue with the MarView support staff
- Ensures that the expectations of QA activities are identified and understood between the task leader, and the team members
- Collects and analyzes metrics produced from the results of the QA process
- Recommends changes in procedures to improve processes

Technical Staff

- Implements task level quality control based on QA standards, policies, and procedures
- Participates in reviews and audits
- Performs corrective actions or process improvements in response to QA findings

MarView Quality Assurance and Surveillance Plan

- Manages and controls defects/errors and corrections
- Tracks the status of defects/errors until closed

The effectiveness of the QA team's effort depends on the support and commitment of the technical staff and all levels of management. All affected groups should be trained in the principles of quality assurance and be committed to the proper inclusion and performance of QA activities within their work efforts.

Required Documentation

All required documents for the MarView program will follow the appropriate standards concerning content and format. When industry standards are not available, the QA team, along with input from the project team, will develop the standards or adapt documents developed by other groups to use as standards within the project. The information used from other groups' documents will be used to ensure compatibility between other standards existing within the organization. Standards will be identified and followed for all required project documentation.

The MarView activities are to be implemented according to MARAD requirements. The documentation is necessary to ensure MarView activities are planned, monitored and controlled and will be used to verify the adequacy of the actual processes and procedures used to develop and/or deliver products/services. Required documentation, as applicable, includes:

- Network Management Project Plan
- IA Security Procedures
- Disaster Recovery Plan
- Computer Support Operations Manual
- Help Desk Operational Manual
- Configuration Management Plan

Other documentation may need to be identified for specific tasks. For example, specific documentation for hardware and software repair may be needed.

Quality Assurance Procedures

Different methods and techniques will be utilized depending on the specific quality assurance activity. The techniques, tools, and procedures that will be used are as follows:

- Reviews - An independent evaluation of an activity or process to assess compliance with the project plan; or to examine products or processes against quality factors through the use of checklists, interviews, and meetings.

MarView Quality Assurance and Surveillance Plan

- Audits - An independent examination of a work product or process to determine compliance with specifications, standards, contractual agreements, or other pre-established criteria.
- Evaluations - An evaluation activity that examines products/services to determine compliance to customer requirements.
- Process Improvement - A process improvement program designed to reduce the error rate in a process.

MarView Quality Assurance will provide an independent review of the processes used at key check points. These reviews will seek to identify risks early, and will simplify monitoring and managing problem areas throughout the project. Due to the dynamic nature of MarView activities and the need to provide quick response requests, the QA team and the technical monitor will identify the sign-off points at key check points of an activity to ensure that expressed goals and requirements are met.

Review Process

Reviews are important to assess compliance with a project plan. Specifically, the review process examines products/services from the context of quality factors. Quality factors are categories of product/service attributes. Examples of quality factors include:

- Correctness - The extent to which a product/service satisfies the customer requirements and the stated objectives.
- Timeliness - The product/service is provided when needed to the customer.
- Reliability - The extent to which a product functions accurately or service is provided on a consistent basis.
- Productivity - The amount of resources to correctly produce the product or deliver the service, including the relationship between the amount of time needed to accomplish work and the effort expended.

Review Procedures

The QA team will plan and conduct a review according to accepted practices and standards. A typical review procedure includes:

1. Identify reviews in the WBS and project schedule
2. Verify correct review procedures are in place
3. Document review results against quality factors
 - 3.1 Verify product/service traceability, if applicable
 - 3.2 Verify product/service against contractual requirements
 - 3.3 Verify product/service against standards and procedures
4. Validate corrections by scheduling follow-up actions and reviews
5. Verify that defects or errors are tracked to closure
6. Document review results against product validation information
7. Summarize review findings for other technical groups/organizations (e.g., help desk, command and control, operations, users)

MarView Quality Assurance and Surveillance Plan

8. Enhance review procedures

Audit Process

The QA team is responsible for conducting product/service and process audits. The purpose of audits is to identify deviations in process performance, identify noncompliance items that cannot be resolved at the technical support or project management level, to validate process improvement/corrective action achievements, and to provide relevant reports to all management levels.

A product audit is an independent examination of work product(s) to assess compliance with specifications, standards, customer requirements, or other criteria. Product audits are used to verify that the product was evaluated before it was delivered to the customer, that it was evaluated against applicable standards, procedures, or other requirements, that deviations are identified, documented, and tracked to closure and to verify corrections.

A process audit is a systematic and independent examination, to determine whether quality activities and related results comply with planned arrangements. And whether these arrangements are implemented effectively and are suitable to achieve MarView objectives.

The QA team will perform the following activities when conducting an audit.

- Define the scope and purpose of the audit within the audit plan.
- Prepare audit procedures and checklists for the audit.
- Examine evidence of implementation and controls.
- Interview personnel to learn the status and functions of the processes and the status of the products.
- Discuss findings with the technical staff and task leader.
- Prepare and submit an audit report to technical monitor/senior management
- Refer unresolved deviations to technical monitor/senior management for resolution.

Audit Procedures

A typical audit would include the following steps:

1. Clearly understand and adhere to the audit scope
2. Conduct preparation meetings in advance of the audit.
 - a. Define areas to be reviewed.
 - b. Define review criteria.
3. Conduct an overview meeting in advance of the audit
4. Understanding of individual team organization, products, and processes.
5. Conduct the planned meetings, interviews, samples, etc.
6. Review the preliminary findings internally with the audit team.

MarView Quality Assurance and Surveillance Plan

7. Verify and classify findings from the audit.
8. Validate audit findings with the audit recipient.
9. Prepare the audit report for the audit client.
10. Provide recommendations on request only.
11. Follow-up on corrective action/process improvement.
12. Improve the audit process.

An audit is considered complete when:

- Each element within the scope of the audit has been examined.
- Findings have been presented to the audited organization.
- Response to draft findings have been received and evaluated.
- Final findings have been formally presented to the audited organization and initiating entity.
- The audit report has been prepared and submitted to recipients designated in the audit plan.
- Document audit findings and recommendations and report to Project Manager.
- The recommendation report, if required by the plan, has been prepared and submitted to recipients designated in the audit plan.
- All of the auditing organization's follow-up actions included in the scope of the audit have been performed.

Evaluation Process

Evaluations examine the activities used to develop/deliver products and services, ultimately determining if the activity is fulfilling requirements. The QA function establishes criteria for an evaluation, verifies the process has been performed, and collects the metrics to describe the actual results of those activities.

Process Improvement

The QA team is responsible for process improvement. Process improvement is successful when an effective process emerges or evolves that can be characterized as: practiced, documented, enforced, trained, measured, and improvable.

A corrective action plan must be developed when a deficiency in the process is detected. Corrective action should prevent the problem from recurring.

Successive steps for implementing a process improvement approach are:

1. Detection of quality-related problems
2. Identification of responsibility
3. Evaluation of importance
4. Investigation of possible causes
5. Analysis of problem

MarView Quality Assurance and Surveillance Plan

6. Preventive action
7. Process controls
8. Disposition of nonconforming items
9. Permanent changes

The QA team will analyze the results of their findings in relation to the results of documented processes used to produce products or services. This comparison will be used to determine which process may need improvement and to determine the effectiveness of changes to the processes. This comparison will also be used to identify best practices that should be continued or implemented at other sites.

Problem Reporting Procedures

Errors, defects, issues, deviations and noncompliance items identified in the MarView activities must be itemized, documented, tracked to closure, and reported by the QA team. The QA team must verify all problems were tracked to closure and must provide continuing feedback to management and the technical support team concerning the status of the problem.

Noncompliance Reporting Procedures

- Problems are resolved with the appropriate task leader, when possible.
- Problems that cannot be resolved with the task leader are elevated to the project manager.
- Problems that have been referred to the project manager are reviewed weekly until they are resolved. Items that cannot be resolved by the project manager within six weeks are elevated to the Program Manager for resolution.

Quality Assurance Metrics

The QA team will work with the technical support staff to identify indicators and their associated measures (Metrics) that are needed to control performance and predict future status of processes used to produce products and services. The metrics will be used to help determine when and where a problem is occurring and what type of impact it will have on the product or service. The metrics will be used to base decisions concerning the selection of best practices to implement in the project.

Metrics that are necessary to monitor the effectiveness of QA processes and procedures are:

1. Number of reviews (QA activities) conducted
2. Status of non-conformance items identified
3. Status of action items open/closed/on-hold
4. Number of days to correct and close a non-conformance item
5. Customer satisfaction levels relating to product and service quality

MarView Quality Assurance and Surveillance Plan

6. Trends for process improvement
7. Lessons learned

MarView Quality Assurance and Surveillance Plan

Appendix - Quality Assurance Check Lists Forms

Quality Assurance Management Plan

Yes	No	Check List Description
___	___	Are project tracking activities evident?
___	___	Are project tracking and oversight being conducted?
___	___	Are all plan reviews conducted according to plan?
___	___	Are all issues arising from peer reviews addressed and closed?
___	___	Are status and review meetings conducted according to the schedule?
___	___	Has a WBS that supports all deliverables/long term projects developed?
___	___	Is change managed according to the Configuration Management Plan?
___	___	Have all deviations from standards and procedures documentation been approved?
___	___	Are project roles and responsibilities defined

Quality Assurance Configuration Management

Yes	No	Check List Descriptions
___	___	Does a Configuration Management Plan (CMP) exist?
___	___	Is the CMP being used?
___	___	Does the CMP contain a list of configuration items to be managed?
___	___	Does the CMP contain change control procedures?
___	___	Does the CMP contain the process to evaluate changes, including estimates and impact?
___	___	Does the CMP identify the person/group who can approve changes to the CMP?
___	___	Has the CMP been added under the configuration management baseline?

Quality Assurance Network Management Required Documentation

Yes	No	Description
___	___	Does a Network Baseline exist?
___	___	Does a Network Acceptance Plan exist?
___	___	Does a Network Operations Manual exist?
___	___	Does a Network Security Procedures Manual exist?
___	___	Does a Network Disaster Recovery Plan exist?
___	___	Does a Configuration Management Plan exist?
___	___	Help Desk Management Plan exist.?

MarView Quality Assurance and Surveillance Plan

Quality Assurance Network Management

Yes	No	Description
___	___	Are changes to the Network documented?
___	___	Are peer reviews implemented for network projects?
___	___	Are problem reporting and tracking procedures used?
___	___	Are original copies of software loaded on the network in a secure CM library?
___	___	Is disk space monitored and recorded on a regular basis?
___	___	Are back up procedures followed?
___	___	Is a secure destination for back up storage identified and used?

Quality Assurance Network Management Equipment Moves

Yes	No	Description
___	___	Has the physical layout of the room been planned?
___	___	Is there furniture available that will support the equipment?
___	___	Are LAN drops available?
___	___	Do the LAN drops work?
___	___	Are all necessary physical connections available?
___	___	Is there adequate power supply?
___	___	Is an UPS needed?
___	___	Have testing procedures been developed?
___	___	Has there been a peer review on the implementation plan?
___	___	Have the necessary requisitions been requested?
___	___	Has all necessary procurement been received?
___	___	Are tools necessary for assembly/disassembly available?

Quality Assurance Computer Support Help Desk

Yes	No	Description
___	___	Does the help desk use problem reporting and tracking procedures?
___	___	Is there a problem escalation process?
___	___	Do the help desk technicians have tools to enable first call completion?
___	___	Are security procedures for equipment followed?
___	___	Are there testing procedures in place to verify that changes to a user environment did not adversely affect other applications?
___	___	Are virus detection procedures used?