

UNCLASSIFIED



Tactical Local Area Network (TACLAN)

Quality Assurance (QA) Plan

Prepared for:

**United States Special Operations Command (USSOCOM)
TACLAN Program Management Office (PMO)**

Prepared by:

Team TACLAN

**9332 Florida Palm Drive
Tampa, Florida 33619**

(b)(4)

17 October 2006

UNCLASSIFIED

Date: October 17, 2006

CHANGE LOG

The following TACLAN Quality Assurance (QA) Plan document is a complete revision and completely supersedes all previous versions. To avoid confusion, please destroy copies of the initial issue.

Document Owner:	QA
-----------------	----

Change	Date	Paragraphs Changed	Description of Change
1	11/4/05	All	Initial Release
2	11/8/05	Section 2.0	Further defined and clarified
3	11/23/05		<ul style="list-style-type: none"> • "Company Proprietary" statement removed • Organizational Chart updated
4	7/26/2006	2, 3.1.1, 1.6, 3.2, 1.2, 6, and 9	<ul style="list-style-type: none"> • Updated list of supporting procedures, checklists, and templates (section 2) • Updated Roles and responsibilities (section 3.1.1) • Updated Overview (section 1.6) to reflect document organization. • Updated tasks and responsibilities (section 3.2) to more accurately reflect current practices. • Updated Scope (section 1.2) section to accurately reflect current practices. • Updated Metrics (section 6) to describe how and when information is collected as well as reported. • Added table showing current checklists used by QA. (section 9) • Organizational Chart Updated

Date: October 17, 2006

(b)(4)

TABLE OF CONTENTS

1. INTRODUCTION.....	1
1.1 PURPOSE.....	1
1.2 SCOPE.....	1
1.3 DEFINITIONS, ACRONYMS AND ABBREVIATIONS.....	1
1.4 REFERENCES	1
1.5 REVISIONS.....	2
1.6 OVERVIEW	2
2. QUALITY OBJECTIVES.....	3
3. MANAGEMENT	5
3.1 ORGANIZATION	5
3.1.1 Program Participants and Responsibilities.....	7
3.2 TASKS & RESPONSIBILITIES	8
3.2.1 Develop and Publish the QAP Charter.....	8
3.2.1.1 Purpose.....	8
3.2.1.2 Role and Responsibility.....	8
3.2.2 Develop and disseminate QAP Objectives.....	9
3.2.2.1 Purpose.....	9
3.2.2.2 Role and Responsibility.....	9
3.2.3 Establish, Implement and Institutionalize the QAP Infrastructure, Plan, and Schedule.....	10
3.2.3.1 Purpose.....	10
3.2.3.2 Role and Responsibility.....	10
3.2.4 Develop Quantitative Measures.....	11
3.2.4.1 Purpose.....	11
3.2.4.2 Role and Responsibility.....	11
3.2.5 Process Improvement.....	12
3.2.5.1 Purpose.....	12
3.2.5.2 Role and Responsibility.....	12
3.2.6 Perform Audits and Inspections.....	13
3.2.6.1 Purpose.....	13
3.2.6.2 Role and Responsibility.....	14
3.3 TASKS SCHEDULING.....	14
3.3.1 Program Schedule	14
3.3.2 Senior Management Checkpoints	15
4. DOCUMENTATION.....	15
5. STANDARDS AND GUIDELINES.....	15
6. METRICS.....	16
7. AUDIT AND INSPECTION METHODOLOGY.....	17
7.1 RESOLUTION AND CORRECTIVE ACTION FOR DEVIATIONS.....	18
7.2 REPORTING.....	19
8. TOOLS AND TECHNIQUES.....	19
9. CONFIGURATION MANAGEMENT.....	21
10. SUPPLIER AND SUBCONTRACTOR CONTROLS.....	21

Date: October 17, 2006

11. QUALITY RECORDS.....21

12. TRAINING21

APPENDIX A ACRONYMS22

Date: October 17, 2006

(b)(4)

1. INTRODUCTION

1.1 Purpose

This Quality Assurance Plan (QAP) documents a comprehensive approach for implementing the TACLAN quality assurance philosophy, and supports TACLAN Program Management, Engineering, Production and Sustainment, Operations and our internal and external customers. This document further provides guidance for executing the QAP and to provide a detailed explanation of the QA and QA Oversight roles. The Quality Program defines:

- Policies, standards, tools, and methods to carry out the QAP
- Roles and responsibilities
- The role of QA in verifying adherence to the TACLAN program standards and processes as defined by the contract and the iGov Tech TACLAN Program Management Organization

Team TACLAN quality assurance program will follow relevant CMMI, ISO 9001, and IT Infrastructure Library (ITIL) service support and service delivery disciplines, which include configuration, incident, problem, change and release management, and service level, capacity, continuity, availability, and IT financial management, respectively. Implementation of tasks identified in this QAP will enable the TACLAN community to attain its goals of maximizing performance, competition, and innovation; encouraging and promoting the use of commercial services; shifting risk to industry; and achieving cost savings.

1.2 Scope

This QAP provides guidance and direction for ensuring that all products and processes developed, engineered and maintained by Team TACLAN satisfy customer and iGov Technologies requirements throughout the duration of the TACLAN program.

This QAP provides a single quality point of reference for the TACLAN Program and will serve as a process-oriented artifact that highlights those elements that are contributors to achievement of TACLAN Program quality objectives. Dissemination of this document to the TACLAN Program Management Office (PMO) provides a roadmap for ensuring that the TACLAN community, PMO and Team TACLAN, share a common understanding of the purpose and activities conducted by QA personnel.

1.3 Definitions, Acronyms and Abbreviations

- Appendix A, Terms and Definitions.

1.4 References

The following documents are referenced in this QAP:

- Program Management Plan (PMP) for TACLAN (b)(4), October 2006
- The Statement of Work (SOW) dated 11 Apr 05.

Date: October 17, 2006

(b)(4)

- QA Charter, TCLN_IMISC_0002_Nov05_R000, January 17, 2006.
- TACLAN QA Audit and Inspection Procedure, TCLN_IPROC_0002_Nov05_R001, November 5, 2005
- TACLAN Document Management Procedure, TCLN_IPROC_0001_Nov05_R000, November 28, 2005
- Process Improvement Guide, TCLN_IGUID_0003_Mar06_R000, March 27, 2006

1.5 Revisions

This QAP is a "living" document. As objectives, tasks, roles, responsibilities processes, procedures, requirements, etc. defined within this plan change, this document will be updated to reflect those changes. In addition, this plan will be reviewed and updated when there is a change in the scope of work and/or other commitments that affect the quality assurance program.

1.6 Overview

The QAP identifies, defines and describes the objectives, organization, tasks, responsibilities, processes, metrics, documentation, tools and resources, and configuration management of the QA Program and its associated artifacts. Specifically the QAP is divided into sections as described below:

- Section 1, describes the purpose, defines the scope, and provides an overview of the Quality Assurance Plan (QAP). Any references used in creating the QAP are also listed in this section.
- Section 2, states objectives of the QA Group (QAG) and provide an overview of the artifacts and processes created, maintained, and used in performing the tasks to meet the objectives.
- Section 3, describes the structure of the Team TACLAN organization and the QAG's position within the organization. Lines of authority are shown in the organization chart included. Roles and responsibilities for those who have a consistent interaction with the QAG are described in this section. This section also lists the primary tasks to be performed by the QAG, describing the purpose, and roles and responsibilities for each primary task. How each task is scheduled, as well as updating schedule information is also described here.
- Section 4, lists all Contract Data Requirements List (CDRL) deliverables by CDRL reference number, and includes the periodicity and role responsible for creating and maintaining the deliverable. Not all deliverables are listed in this section. This section lists only those deliverables identified in the SOW and represent the minimum documentation that must be produced during the Program to ensure that the work product(s) that is (are) developed satisfies the requirements.
- Section 5, references standards and guidelines (both organizationally derived and customer specified) that are expected to be used within the Program, and addresses how compliance with these standards and guidelines is to be determined.

Date: October 17, 2006

(b)(4)

- Section 6, describes the metrics that are to be captured and monitored for the QA function in meeting the objectives specified in Section 2. At a minimum, measurements used to determine the cost and schedule status of the QA activities should be made.
- Section 7 describes the review and audit process used in conducting Team TACLAN reviews and audits of deliverables and processes. The QA plan describes the various types of reviews and audits to be carried out during the Program in section 3.2. This section provides the details how those reviews and/or audits should be conducted.
- Section 8, describes the procedures for reporting and handling problems, deviations, and non-compliance identified during Program reviews and audits.
- Section 9, describes specific tools, techniques and methodologies used to carry out the review and audit activities identified in this plan. This section includes a listing of the checklists used to objectively audit and evaluate all deliverables and processes within Team TACLAN.
- Section 10, describes how QA will maintain configuration control of the listed artifacts created and maintained by the QA Group.
- Section 11, describes how QA will ensure that TACLAN Team members use processes, standards and procedures, in performing tasks.
- Section 12, describes the record keeping of QA Records.
- Section 13 describes the assessment of training needs and the intent of using the assessment to define Team TACLAN training needs.
- Appendices are used to provide further clarification where needed. This clarification may include examples of QA activities and artifacts

2. QUALITY OBJECTIVES

The objectives of the QA Group are to ensure, through out the TACLAN lifecycle, that:

- TACLAN standard processes are adequately documented, adhered to and continuously improved
- Industry, Government, and academic best practices specifically in the areas of CMMI, ISO, IEEE, and the EIA are applied to ensure that all products are of the highest possible quality and exceed requirements of the TACLAN Program
- Process improvements are identified, developed, and implemented within the TACLAN Program in a timely manner

Date: October 17, 2006

(b)(4)

- Communications channels are promoted and maintained that foster a climate in which the identification of process-related deficiencies and improvements are encouraged
- TACLAN community goals of maximizing performance, competition, and innovation are attained
- TACLAN managers and staff have and maintain visibility into the processes being used by the program and the products being built

To achieve these quality objectives the QA Group develops and publishes the QAP Charter; develops and disseminates the above QAP objectives; develops quantitative measures that map to the QAP objectives; and establishes, implements and institutionalizes the QAP plan and schedule. Major components of the QA Plan include the quality assurance activities and work products and the audit and inspection process.

QA processes used in achieving these objectives include the following:

- **Quality Assurance Planning** – The QA Group develops and maintains the Program’s QA charter and plan
- **Process Consulting and Support** – The QA Group consults with Program personnel on process issues, policies, standards, change management and process improvements
- **Evaluation and Reporting**
 - **Work Product Audit** – The QA Group evaluates work products to verify compliance with applicable standards and requirements. Results are reported to the functional Lead, DPM and the Program Manager
 - **Activity Audit** – The QA Group evaluates development activities to verify compliance with applicable procedures. Results are reported to the functional Lead, DPM and the Program Manager
- **Non-compliance Resolution** – Resolution of audit and inspection findings is negotiated between the Program Manager and the QA Group. Any non-compliance issues that cannot be resolved at the Program level are progressively escalated for management resolution
- **Status Reporting** – The QA Group reports the results of its activities to the program staff, and program management on a regular basis. Summary status and trend data are reported to senior management
- **Maintain QA Records** – Identify and maintain records to discover and address trends and to support improvement activities
- **Continuous Improvement of Processes** – Improvement of processes is based on audits of TACLAN work products, processes, measurements and stakeholder feedback

In completing these processes the QA Group will perform the tasks listed in Section 3.2 of this document using standard processes, procedures, checklists, and templates based on CMMI and

Date: October 17, 2006

(b)(4)

(b)(4)

As a truly independent organization, the QA Group objective is to verify execution of standards and processes, tailored to the needs of the TACLAN Program. Verification that the TACLAN Team is complying with the TACLAN PMO and iGov Tech's standards and processes is accomplished through examination of direct artifacts which show that the standard or process has been implemented or performed appropriately and indirect artifacts that are bi-products of performance and/or tailored standards or processes.

3. MANAGEMENT

3.1 Organization

Team TACLAN QAP will be executed by two major groups: the Quality Assurance Group (QAG) and the Team TACLAN Program Manager (PM). A third group, the Team TACLAN Transformation Advisory Board (T3AB) is comprised of senior general officer-level leaders in the fields of academia, industry, and government. Individual members of the T3AB may provide counsel to the PM as they deem appropriate, and are openly invited to participate as a member of the QA Program.

The QAG, led by certified quality assurance engineers, has oversight of the Engineering, Production and Sustainment, and Operation areas within Team TACLAN and will report directly to the Team TACLAN PM and iGov Tech management, and provide current information on audits, process improvements, issues, and program risks.

UNCLASSIFIED

TACLAN Quality Assurance (QA) Plan

(b)(4)



UNCLASSIFIED



Date: October 17, 2006

(b)(4)

3.1.1 Program Participants and Responsibilities.

The following table defines the various Quality Assurance / Process Improvement responsibilities held by the roles in the Program:

Role or Staff	Responsibility
T3AB	<ul style="list-style-type: none"> • Represent the TACLAN Programs views and concerns regarding Quality Assurance • Provides TACLAN PM with strategic advice, guidance, and assistance that will aid the PM in executing the QA Program. • Keep the QA Program focused on satisfying validated program quality objective • Provides independent observations and recommendations on matters relating to the successful accomplishment of TACLAN quality objectives
Program Manager (PM)	<ul style="list-style-type: none"> • Represent the TACLAN Programs views and concerns regarding Quality Assurance • Ensures adequate funding and resources are available to implement this quality assurance plan • Reviews the Quality Assurance artifacts (i.e. Charter, Plan, Processes, etc) to ensure TACLAN Program Management Organization's quality objectives are met • Review, approve, and institute documented processes used in performing TACLAN tasks and activities • Holds weekly status meetings with QA/PI Engineer to discuss issues affecting the quality of Program deliverables and Team TACLAN processes
Deputy Program Managers (DPM) and Team Leads	<ul style="list-style-type: none"> • Provides on-going support to QA activities for the duration of the TACLAN Program • Understand the responsibilities and issues of the QA Program. • Reviews QA Audit Reports, providing comment if needed, and agrees to stated "Proposed Corrective Action/Resolution" and "Assigned To" for deviations noted • Prepares and or aids in the implementation of QA activities within their respective functional areas • Comment on and provide functional area approval of documented processes used in performing TACLAN tasks and activities

Date: October 17, 2006

(b)(4)

Role or Staff	Responsibility
Team Members	<ul style="list-style-type: none"> • Provides on-going support to QA activities for the duration of the TACLAN Program • Understand the responsibilities and issues of the QA Program • Perform their respective TACLAN tasks and activities using documented and approved processes • Document and obtain approval of processes used in performing TACLAN tasks and activities
QA and Process Improvement (PI) Manager	<ul style="list-style-type: none"> • Ensures adequate funding and resources are available to implement this plan • Reviews and approves all QA work products and deliverables • Provides expertise, guidance, and support to QA/PI Engineers in accomplishing planned tasks
QA and PI Engineer	<ul style="list-style-type: none"> • Represent the TACLAN Programs views and concerns regarding Quality Assurance • Prepares and implements all Quality Assurance artifacts (i.e. Charter, Plan, Processes, etc) • Provides QA Manager Reviews and status reports of QA activities • Identifies training needs and ensures team members receive the training • Reviews Team TACLAN deliverables and processes for quality assurance • Coordinates with Program members as required to perform tasks identified the QAP • Review and approve documented processes used in performing TACLAN tasks and activities

3.2 Tasks & Responsibilities

3.2.1 *Develop and Publish the QAP Charter.*

3.2.1.1 *Purpose.*

Ensure that the TACLAN community understands the approach for implementing the TACLAN quality assurance philosophy which supports TACLAN Program Management, Engineering, Production and Sustainment, Operations and customers. The QA Charter defines the QA Program and provides the guidance for executing the QA Plan (QAP), QA activities, and an explanation of the QAP roles.

3.2.1.2 *Role and Responsibility.*

The below table represents the roles and responsibilities in performing this task:

Date: October 17, 2006

(b)(4)

Role or Staff	Responsibility
T3AB	<ul style="list-style-type: none"> Provides Team TACLAN PM with strategic advice, guidance, and assistance that will aid the PM in executing the QA Program
Program Manager	<ul style="list-style-type: none"> Reviews the Quality Assurance artifacts (i.e. Charter, Plan, Processes, etc) to ensure TACLAN Program Management Organization's quality objectives are met
QA and PI Manager	<ul style="list-style-type: none"> Provides expertise, guidance, and support to QA/PI Engineers in accomplishing planned tasks
QA and PI Engineer	<ul style="list-style-type: none"> Prepares and implements all Quality Assurance artifacts (i.e. Charter, Plan, Processes, etc)

3.2.2 Develop and disseminate QAP Objectives.

3.2.2.1 Purpose.

Ensure that the TACLAN community shares a common understanding of strategic QA objectives affecting the TACLAN mission. This will be done primarily through the publication and dissemination of the QA Charter (task 3.2.1 above), Plan, Processes, and other QA artifacts. All QA related documents are maintained and made available to everyone through the Team TACLAN file server.

QA/PI Engineer attends meetings held across the program as needed to represent the TACLAN Programs views and concerns regarding Quality Assurance.

3.2.2.2 Role and Responsibility.

The below table represents the roles and responsibilities in performing this task:

Role or Staff	Responsibility
T3AB	<ul style="list-style-type: none"> Represent the TACLAN Programs views and concerns regarding Quality Assurance
Program Manager	<ul style="list-style-type: none"> Represent the TACLAN Programs views and concerns regarding Quality Assurance Holds weekly status meetings with QA/PI Engineer to discuss issues affecting the quality of Program deliverables and Team TACLAN processes
DPM and Team Leads	<ul style="list-style-type: none"> Understand the responsibilities and issues of the QA Program Prepares and or aids in the implementation of QA activities within their respective functional areas
Team Members	<ul style="list-style-type: none"> Understand the responsibilities and issues of the QA Program

Date: October 17, 2006

(b)(4)

Role or Staff	Responsibility
QA and PI Manager	<ul style="list-style-type: none"> • Provides expertise, guidance, and support to QA/PI Engineers in accomplishing planned tasks
QA and PI Engineer	<ul style="list-style-type: none"> • Represent the TACLAN Programs views and concerns regarding Quality Assurance • Prepares and implements all Quality Assurance artifacts (i.e. Charter, Plan, Processes, etc) • Provides QA Manager Reviews and status reports of QA activities • Identifies training needs and ensures team members receive the training

3.2.3 Establish, Implement and Institutionalize the QAP Infrastructure, Plan, and Schedule.

3.2.3.1 Purpose

Provide QA guidance and direction in attaining the TACLAN Programs quality objectives of standardizing, documenting, implementing, and improving processes, and best practices that ensure the delivery of high quality products. The establishment of the QA Program allows management and staff visibility and insight into the processes being used and improved by the program and the quality of the products being built.

3.2.3.2 Role and Responsibility

The below table represents the roles and responsibilities in performing this task:

Role or Staff	Responsibility
T3AB	<ul style="list-style-type: none"> • Represent the TACLAN Programs views and concerns regarding Quality Assurance
Program Manager	<ul style="list-style-type: none"> • Reviews the Quality Assurance artifacts (i.e. Charter, Plan, Processes, etc) to ensure TACLAN Program Management Organization's quality objectives are met • Review, approve, and institute documented processes used in performing TACLAN tasks and activities • Holds weekly status meetings with QA/PI Engineer to discuss issues affecting the quality of Program deliverables and Team TACLAN processes
DPM and Team Leads	<ul style="list-style-type: none"> • Provides on-going support to QA activities for the duration of the TACLAN Program • Understand the responsibilities and issues of the QA Program • Prepares and or aids in the implementation of QA activities within their respective functional areas

Date: October 17, 2006

(b)(4)

Role or Staff	Responsibility
Team Members	<ul style="list-style-type: none"> Provides on-going support to QA activities for the duration of the TACLAN Program Understand the responsibilities and issues of the QA Program Perform their respective TACLAN tasks and activities using documented and approved processes Document and obtain approval of processes used in performing TACLAN tasks and activities
QA and PI Manager	<ul style="list-style-type: none"> Ensures adequate funding and resources are available to implement this plan Provides expertise, guidance, and support to QA/PI Engineers in accomplishing planned tasks
QA and PI Engineer	<ul style="list-style-type: none"> Prepares and implements all Quality Assurance artifacts (i.e. Charter, Plan, Processes, etc) Provides QA Manager Reviews and status reports of QA activities Identifies training needs and ensures team members receive the training Reviews Team TACLAN deliverables and processes for quality assurance Coordinates with Program members as required to perform tasks identified the QAP Review and approve documented processes used in performing TACLAN tasks and activities

3.2.4 Develop Quantitative Measures

3.2.4.1 Purpose

The purpose of this task is to identify measurements that map to QAP objectives, to obtain the source of those measurements, and ascertain which metrics are to be delivered in what format and layout.

3.2.4.2 Role and Responsibility

The below table represents the roles and responsibilities in performing this task:

Role or Staff	Responsibility
T3AB	<ul style="list-style-type: none"> Keep the QA Program focused on satisfying validated program quality objectives Provides independent observations and recommendations on matters relating to the successful accomplishment of TACLAN quality objectives Represent the TACLAN Programs views and concerns regarding Quality Assurance

Date: October 17, 2006

(b)(4)

Role or Staff	Responsibility
Program Manager	<ul style="list-style-type: none"> Review, approve, and institute documented processes used in performing TACLAN tasks and activities Holds weekly status meetings with QA/PI Engineer to discuss issues affecting the quality of Program deliverables and Team TACLAN processes
QA and PI Manager	<ul style="list-style-type: none"> Provides expertise, guidance, and support to QA/PI Engineers in accomplishing planned tasks
QA and PI Engineer	<ul style="list-style-type: none"> Prepares and implements all Quality Assurance artifacts (i.e. Charter, Plan, Processes, etc)

3.2.5 Process Improvement

3.2.5.1 Purpose

Leverage process improvement ideas through the use of audit results and inputs of individuals throughout TACLAN Program. Individual innovations and best practices are captured and analyzed for implementation throughout all parts of the organization. This enables the continuous improvement within the Team TACLAN organization.

QA serves as the basis for process improvement and provide the foundation for long-term benefits to the TACLAN Program. The QA group will ensure that TACLAN standard processes are followed, adequately documented and continuously improved by assisting the TACLAN staff in defining, developing, implementing, and maintaining a set of standard program processes.

Team TACLAN will also apply industry, Government, and academic best practices and employ CMMI®, IEEE, ISO, and the Electronic Industries Alliance technical standards as applicable to ensure that TACLAN products are of the highest possible quality and exceed customer expectations and program requirements.

3.2.5.2 Role and Responsibility

The below table represents the roles and responsibilities in performing this task:

Role or Staff	Responsibility
T3AB	<ul style="list-style-type: none"> Keep the QA Program focused on satisfying validated program quality objectives Provides independent observations and recommendations on matters relating to the successful accomplishment of TACLAN quality objectives Represent the TACLAN Programs views and concerns regarding Quality Assurance

Date: October 17, 2006

(b)(4)

Role or Staff	Responsibility
Program Manager	<ul style="list-style-type: none"> • Represent the TACLAN Programs views and concerns regarding Quality Assurance • Review, approve, and institute documented processes used in performing TACLAN tasks and activities • Holds weekly status meetings with QA/PI Engineer to discuss issues affecting the quality of Program deliverables and Team TACLAN processes
Deputy Program Managers (DPM) and Team Leads	<ul style="list-style-type: none"> • Provides on-going support to QA activities for the duration of the TACLAN Program • Reviews QA Audit Reports, providing comment if needed, and agrees to stated "Proposed Corrective Action/Resolution" and "Assigned To" for deviations noted • Prepares and or aids in the implementation of QA activities within their respective functional areas • Comment on and provide functional area approval of documented processes used in performing TACLAN tasks and activities
Team Members	<ul style="list-style-type: none"> • Provides on-going support to QA activities for the duration of the TACLAN Program • Perform their respective TACLAN tasks and activities using documented and approved processes • Document and obtain approval of processes used in performing TACLAN tasks and activities
QA and PI Manager	<ul style="list-style-type: none"> • Provides expertise, guidance, and support to QA/PI Engineers in accomplishing planned tasks
QA and PI Engineer	<ul style="list-style-type: none"> • Prepares and implements all quality assurance plans, processes, and procedures • Provides QA Manager Reviews and status reports of QA activities • Identifies training needs and ensures team members receive the training • Reviews TACLAN deliverables and processes for quality assurance • Review and approve documented processes used in performing TACLAN tasks and activities

3.2.6 Perform Audits and Inspections

3.2.6.1 Purpose

Audits and inspections are used to determine the accurate status of achieving the Programs Quality Assurance / Process Improvement objectives. The purpose of audits and inspection are to:

Date: October 17, 2006

(b)(4)

- Provide QA support to configuration audits (Physical and Functional), material review boards, and configuration management activities.
- Detect and prevent problems that could result in unsatisfactory performance.
- Initiate timely and effective corrective action.
- Monitor the implementation of corrective actions.

3.2.6.2 Role and Responsibility.

The below table represents the roles and responsibilities in performing this task:

Role or Staff	Responsibility
Program Manager	<ul style="list-style-type: none"> • Holds weekly status meetings with QA/PI Engineer to discuss issues affecting the quality of Program deliverables and Team TACLAN processes
Deputy Program Managers (DPM) and Team Leads	<ul style="list-style-type: none"> • Reviews QA Audit Reports, providing comment if needed, and agrees to stated "Proposed Corrective Action/Resolution" and "Assigned To" for deviations noted • Prepares and or aids in the implementation of QA activities within their respective functional areas
Team Members	<ul style="list-style-type: none"> • Provides on-going support to QA activities for the duration of the TACLAN Program
QA and PI Manager	<ul style="list-style-type: none"> • Provides expertise, guidance, and support to QA/PI Engineers in accomplishing planned tasks
QA and PI Engineer	<ul style="list-style-type: none"> • Prepares and implements all quality assurance plans, processes, and procedures • Provides QA Manager Reviews and status reports of QA activities • Reviews TACLAN deliverables and processes for quality assurance • Coordinates with Program members as required to perform tasks identified the QAP

3.3 Tasks Scheduling

3.3.1 Program Schedule

The Program will use Microsoft® Project for tracking all tasks on this Program. The schedule will include all tasks outlined in the Quality Assurance Plan, Section 3.2. QA Audits of the Program Management contract deliverables will be performed a minimum of 5 days prior to contract due date to ensure proper review and feedback to the PM prior to contract delivery. All other audits and reviews will be documented in the In the Team TACLAN Program schedule which is maintained by the Project Control Manager. Inputs and updates to the Program schedule

Date: October 17, 2006

(b)(4)

are provided to the Project Control Manager weekly. Weekly schedule status reviews are held with the PM, QA, DPMs and Team Leads as required.

3.3.2 Senior Management Checkpoints

Senior management reviews are conducted at all major Program milestones included on the Program schedule and in accordance with the Program Management Plan. In addition, senior management will be briefed on a monthly basis prior to the formal Program Management Reviews (PMR) mandated by the TACLAN PMO in the SOW. QA/PI also provides input and metrics to the DPM Operations for the Monthly Status Report (MSR) deliverable.

4. DOCUMENTATION

The Program Management Plan (PMP) for TACLAN defines Program deliverables required by the Statement of Work (SOW) and Section 3.10.2 describes the managed data repository and associated rules, which will be used in managing TACLAN documentation.

Team TACLAN will provide the required contract data as set forth in the Statement of Work. All delivered Team TACLAN documents and data are scheduled to be reviewed by the TACLAN PMO within 10 working days and comments provided for inclusion in the final deliverable.

Audits/inspections will be performed, for all deliverables within five days of each delivery made to the customer. The checklists identified in Section 8 below will be used in objectively evaluating document deliverables.

5. STANDARDS AND GUIDELINES

The following TACLAN PMO supplied documents are to be used as standards and guidelines. Compliance with these will be verified through the performance of Audit and Inspection.

- Contract # T H92222-04-R-0033, Tactical Local Area Network (TACLAN), on 7 October 2005
- TACLAN Task Order Statements of Work
- TACLAN CDRLs.
- Data Item Descriptors (DIDs)

The following Team TACLAN developed documents represent deliverables to be used as standards and guidelines for activities performed on this program. Compliance with these will be verified through the performance of Audit and Inspection of deliverables and processes used within the Team TACLAN organization.

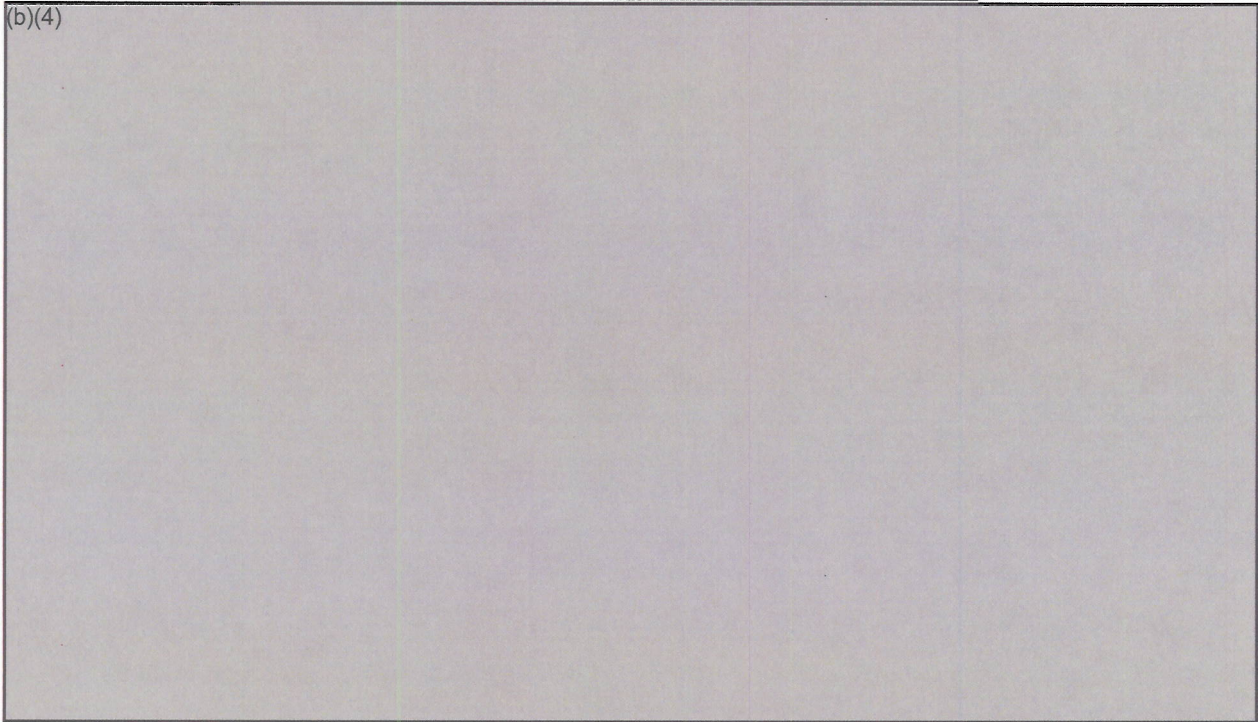
Reference Number	Deliverable
PM0001	Program Management Plan (PMP)
D0001	Systems Engineering Plan (SEP)

Date: October 17, 2006

(b)(4)

Reference Number	Deliverable
D0004	Software Requirements Specification (SRS)
D0005	System Product Specification (SPS)
T0001	Test Program Plan
T0003	Test Support Services Plan
T0004	User Evaluation (UE) Test Plan and Procedures
CM0001	Configuration Management Plan
QA0001	Quality Assurance Plan
ILS0001	Integrated Logistics Support (ILS) Plan
ILS0006	Systems Training Plan
TBD	Communications Plan

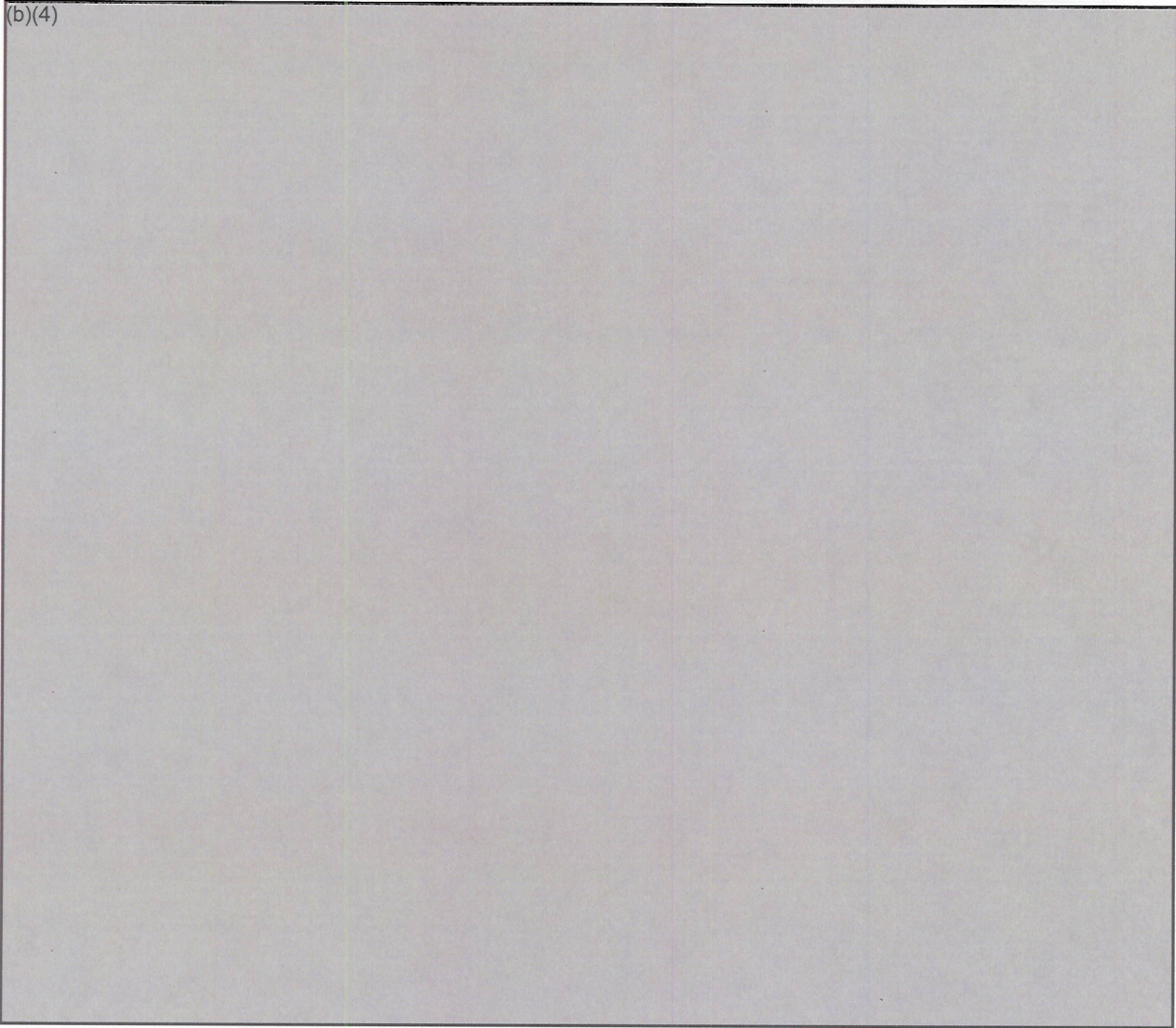
(b)(4)



Date: October 17, 2006

(b)(4)

(b)(4)



7. AUDIT AND INSPECTION METHODOLOGY

The QA audit and inspection process is an integral part of Team TACLAN management approach that will afford QA activities with essential independence from engineering teams, by having QA reporting dotted line to the Team TACLAN PM and senior management. The audit and inspection process will focus upon product and process improvement to provide not only better quality products, but also more efficient and effective processes to support the TACLAN community.

The QA activities will be performed using the Software Engineering Institutes (SEI) Capability Maturity Model Integrated (CMMI®) and ISO 9001 management and quality practices, to ensure that TACLAN is receiving the benefit of government, industry and academia's best practices for program/process management, product development and product support. QA will be



Date: October 17, 2006

(b)(4)

responsible for monitoring the iGov Tech team for adherence to iGov Tech's TACLAN program processes and standards thus providing program management and the senior management visibility into all processes which will enable immediate and focused attention when and where require.

The audit and inspection review process will require that:

- The service or product to be audited/reviewed is documented in the QAP;
- The service or product is scheduled for audit/inspection in the QA schedule;
- Relevant parties are notified of the audit/inspection;
- The identified documents, code, and materials are provided to the QA auditor prior to the scheduled audit/inspection;
- The audit/inspection may include interviews and review of work products;
- The audit/inspection is conducted;
- The findings are documented in a standard audit/inspection report;
- The findings are delivered to the audited staff and the immediate supervisor;
- Deviations are identified in the audit/inspection report with proposed due dates for correction. The supervisor of the person being audited either accepts or rejects each deviation and the overall report.
 - If rejected, changes to the report will be negotiated between QA and the immediate supervisor.
 - If accepted, the Audit Report is closed and the deviations from that report will be entered into a master Audit Findings Log and tracked to closure by QA.
- Deviations are closed when the responsible party notifies QA with the appropriate evidence to close the deviation. Alternatively, QA may close past deviations during a subsequent Audit when interviewing staff or reviewing documentation. The status of each deviation is updated in the Audit Findings Log by QA.

Audits/Reviews will facilitate the identification of deviations, improvements, and best practices early in a project's life cycle, thereby providing for more effective management of defects, issues, and risks to the overall program. The QA group can assure that the TACLAN program is operating in compliance with the accepted and approved processes, standards, and procedures.

7.1 Resolution and Corrective Action for Deviations

Those items requiring action due to a deviation issue will be documented and tracked to closure. A record of all organization deviations will be documented in the Audit Findings Log. After an audit is completed, QA records will be maintained electronically and will be retained for the duration of the contract, and/or as required by contractual agreements. Deviations are identified in the audit/inspection report with proposed due dates for correction. Any issues, which are not resolvable at the DPM level or unresponsiveness by team members in completing corrective actions, are reported to the Program Manager for assistance in resolution.

Date: October 17, 2006

7.2 Reporting

Team TACLAN PM and QA hold weekly meetings to review completed audits / inspections reports, QA Metrics and the master Audit Findings Log. Any QA issues are made known to the PM.

The Team TACLAN Monthly Status Report (MSR) reports on the audits/inspections planned, completed, deviations / non-compliances opened or closed, time spent and artifact page count. This report is delivered to the TACLAN PMO and the information contained in this report is obtained from the QA Metrics and deviation / non-compliance files located on the Team TACLAN shared network.

The quarterly Program Management Review (PMR) reports on the same information, will also include a summary of issues (major or minor) open, and closed. This briefing is created and presented to the TACLAN PMO and the Prime Contractors Senior Management. The information contained in this briefing is obtained from the QA Metrics and deviation / non-compliance files located on the Team TACLAN shared network.

All QA audit / inspection records are maintained on the Team TACLAN file server and are available at any time for any member of Team TACLAN and the TACLAN PMO to review.

(b)(4)



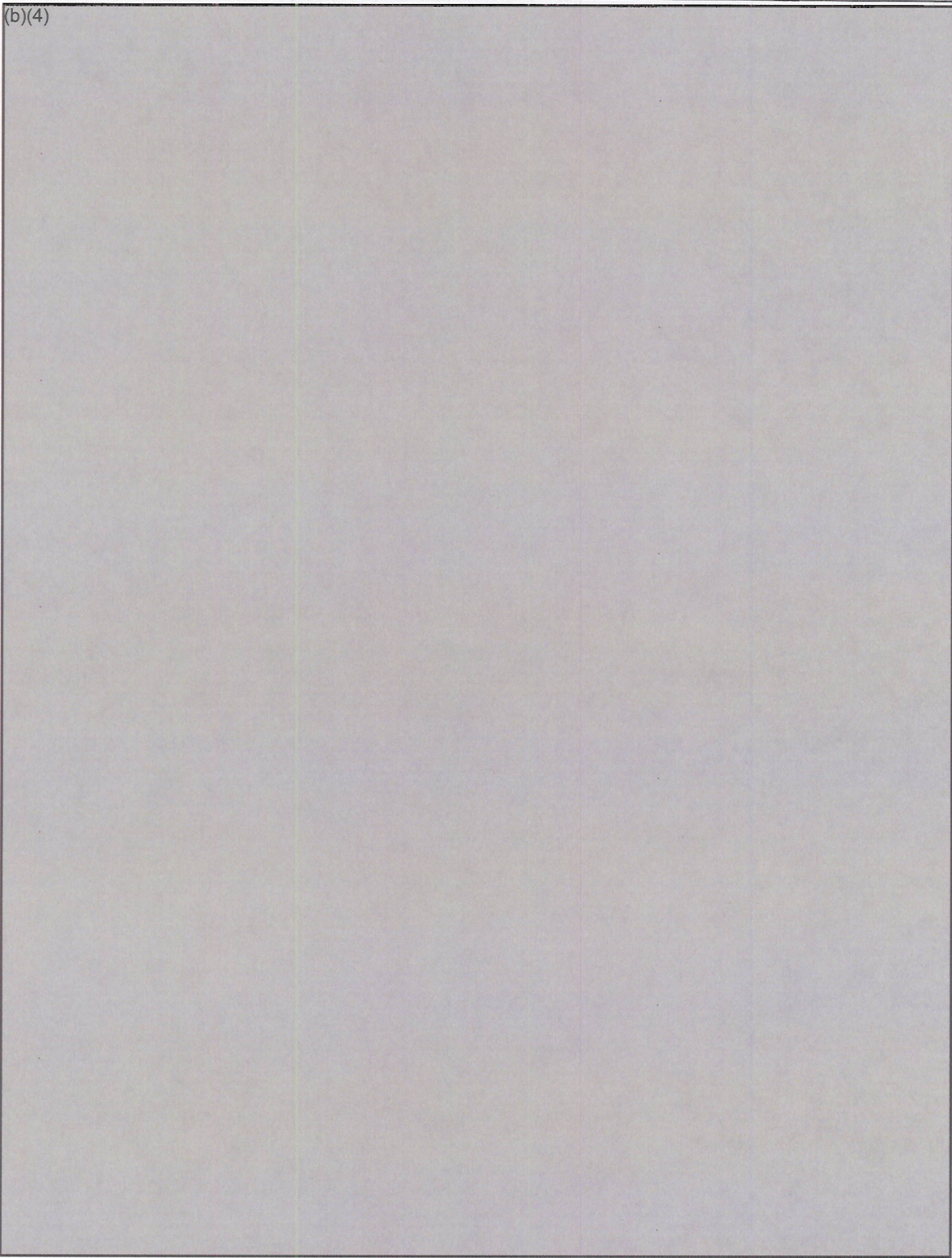
UNCLASSIFIED

TACLAN Quality Assurance (QA) Plan

Date: October 17, 2006

(b)(4)

(b)(4)



UNCLASSIFIED



Date: October 17, 2006

(b)(4)

9. CONFIGURATION MANAGEMENT

The QA Plan is designated as a Configuration Item (CI) and the QA engineer will follow all TACLAN configuration management (CM) practices as appropriate in maintaining this document.

All other QA documents will be versioned and controlled according the TACLAN Document Management process and the Process Improvement Guide.

10. SUPPLIER AND SUBCONTRACTOR CONTROLS

The quality assurance activities will assist Team TACLAN PM in ensuring that all TACLAN Team contractors and / or subcontractors follow the TACLAN processes, standards, and procedures as appropriate. The Program Manager is responsible for all contractual documentation throughout the entire life cycle of the Program.

11. QUALITY RECORDS

For the purpose of electronic record keeping, the following QA records will be available on a common share drive on the Team TACLAN network to the Program and QA Staff: the QA Plan, Audit Reports, the Audit Findings log, QA checklists, the QA Audit Schedule, QA measures among other records. The Program Management Plan (PMP) for TACLAN describes the managed data repository and associated rules, which will be used in managing TACLAN documentation and data.

12. TRAINING

In addition to formal TACLAN training, the QA Group will assess the training needs of Team TACLAN as applied against QA Program requirements. Once completed, the assessment will form the basis for creating training materials, providing training to Team TACLAN members on the purpose and value of QA, and documenting attendance and results of training. The intent is to ensure all team members are proficient in their roles and responsibilities in supporting QA within the TACLAN Program. Training will be subject to QA and Program Manager approval and availability of funds.

Date: October 17, 2006

(b)(4)

APPENDIX A ACRONYMS

Acronym List/Glossary	
A	
B	
BAT	Baseline Acceptance Testing
C	
CDR	Critical Design Review
CDRL	Contract Data Requirements List
CM	Configuration Management
CMMI	Capability Maturity Model Integration
D	
DPM	Deputy Program Manager
E	
ECP	Engineering Change Proposal
EPG	Engineering Process Group
F	
G	
H	
I	
ILS	Integrated Logistics Support
IPS	Initial Production Set
ISO	International Organization for Standardization
IT	Information Technology
ITIL	IT Infrastructure Library
J	
K	
L	
LAN	Local Area Network
M	
N	
O	
O&M	Operations and Maintenance
P	
PAC	Post-Award Conference
PCM	Project Control Manager
PDR	Preliminary Design Review

Date: October 17, 2006

(b)(4)

Acronym List/Glossary	
PM	Program Manager
PMP	Program Management Plan
PPQA	Process & Product QA
Q	
QA	Quality Assurance
QAG	Quality Assurance Group
QAP	Quality Assurance Plan
R	
S	
SAR	Safety Assessment Report
SEP	Systems Engineering Plan
SPS	System Product Specification
SRS	Software Requirement Specification
T	
TACLAN	Tactical Local Area Network
U	
UE	User Evaluation
V	
VDD	Version description Document
W	
X	
Y	
Z	