



# REQUIREMENTS DEVELOPMENT AND MANAGEMENT Plan

<<Project Name>>

---

## <<Template and Procedure>>

<<This template document should be developed using the project's Business Case as guidance for the plan. The plan is developed in accordance with the Solution Life Cycle (SLC). The Requirements Development and Management (RDM) plan is to be created during the vision phase of the SLC and maintained throughout the remaining phases as specified in the RDM Process Guide. *Note: All instructions that are in these “<<... >>” brackets should be removed.* >>

## 1.0 INTRODUCTION

### 1.1 PURPOSE

This document is an SFA planning tool to be used for developing and managing the requirements of the << insert project name >> project. Its purpose is to establish reasonable plans for performing requirements development and management activities throughout the acquisition life cycle. Refer to the Requirements Development and Management Policy for further clarification of SFA's commitment to planning, developing and managing the requirements of systems.

### 1.2 ACQUISITION SUMMARY

<<Briefly describe this acquisition. Define the operational needs, key operational effectiveness, and or suitability issues that must be addressed by this acquisition. This section is summarized in the Business Case and can also be copied here. >>

### 1.3 REQUIREMENT OBJECTIVES

The objectives of RDM are to improve the development and maintenance of requirements. One of the goals of this organization is to be compliant with the System Acquisition Capability Maturity Model (SA-CMM), which defines five levels of software process maturity. Level 2 of the SA-CMM, the Repeatable level, defines an organization that has basic project management processes in place to track cost, schedule, and effectiveness of repeatable processes characterized at this level. RDM is a part of the repeatable level and must accomplish these objectives:

- Objective 1: Requirements are controlled to establish a baseline for management use.
- Objective 2: System plans, products, and activities are kept consistent with the requirements.

### 1.4 CONSTRAINTS

<< In this section, include an overview of constraints affecting requirements development and management. The following constraints differ from risks in that they already exist and cannot be changed. For example, risks can be prevented, where as constraints are constant to the environment. These are constraints that can be managed and therefore are identified during the planning phase to ensure they are managed throughout the life cycle, reference the table below. The following table shows examples of possible significant constraints affecting requirements development and management. >>



The constraints to requirements development and management for the <<name of project>> are listed below.

Name/Type	Constraints	How will the project team manage these constraints?
Schedule/Cost	<< Describe or determine the schedule/budget for requirements development and management. For example when must the work products or service be delivered. >>	<<Insert Proposed Solution>>
Technical	<< Describe or determine the technical context for requirements development and management, e.g.: what hardware and/or software systems must be used and performance capability constraints. >>	
Interdependencies/Compatibility	<< Describe or determine requirements that interface with existing or future systems, applications, or programs. >>	

**1.5 RISKS**

<<Briefly describe the risks for this project. Identify any additional risks and ensure that they are added to the RDM component of the Risk Matrix managed by the System Acquisition Plan. **Reference the System Acquisition Planning Process (SAP) Guide**>>

**2.0 REFERENCES**

<< Identify documents referenced by this plan or used in the development of this plan. List the title, version, date, and owner of the document. Refer to the table below as a guide.>> E.g.: RDM policy, SAP Plan, etc.

Title	Version and Date	Document Owner
<<Insert Document Title>>	<<Insert Version/Date>>	<<Insert Document Owner>>



### 3.0 RESOURCES

<<Describe or reference the organizational structure to be used in defining ongoing management of requirements, including the contractor, user and support organizations involved, their relationships to one another, and the authority and responsibility of each organization for carrying out required activities. >>

### 3.1 ROLES AND RESPONSIBILITIES

<<List the name, contact details (email, phone, office location) and the organization of the person assigned to each role as they become available. All SFA personnel involved in the acquisition of this system should be listed below. This list should be maintained throughout the life cycle of the acquisition. An organization chart can be included. Add any additional roles needed that are not included in the table, and remove any that are not appropriate for this acquisition. **Reference** the SAP roles and responsibilities organization chart and **CM Process guide**. >>

The roles and responsibilities involved in requirements development and management are listed below.

Role	Name	Contact Details	Organization
<<Insert Role>>	<<Insert Name>>	<<Insert Contact>>	<<Insert Organization>>

### 3.2 EXPERIENCE AND TRAINING

<<Describe the required skills to implement the plan. Identify RDM team experience or the training received. Include any plans to provide additional mentoring, training or orientation, refer to Figure below as a guide. >>

Personnel assigned to key acquisition roles have been trained or have the experience to perform their roles effectively, as shown.

Name	Required Skill Level	Role	Experience	Training
<<Insert name of person>>	<<Insert level>>	<<Insert Role>>	<<Insert Experience>>	<<Insert type of training taken/needed>>



### 3.3 HARDWARE/SOFTWARE RESOURCES

<< Specify other resources, including hardware, software tools, documents, etc. (e.g. Microsoft Excel, Microsoft Project, Rational, and Clear Quest).>>

### 4.0 APPROACH

<<The purpose of the approach is to provide and document the procedures used to develop detailed and well-defined requirements and maintaining control of the requirements throughout the SLC. >>

This section details the layout for developing and managing requirements for the <name of the project>.

#### 4.1 OBJECTIVES

<< It is important to achieve and maintain control over the requirements since they form the basis for the project's plans, work products and other activities. **Reference the RDM Process Guide.** >>

The objective of RDM is to establish a clear and common understanding of the requirements between the project team, end users, and affected groups that will be addressed by the <name of project>.

#### 4.2 ACTIVITIES

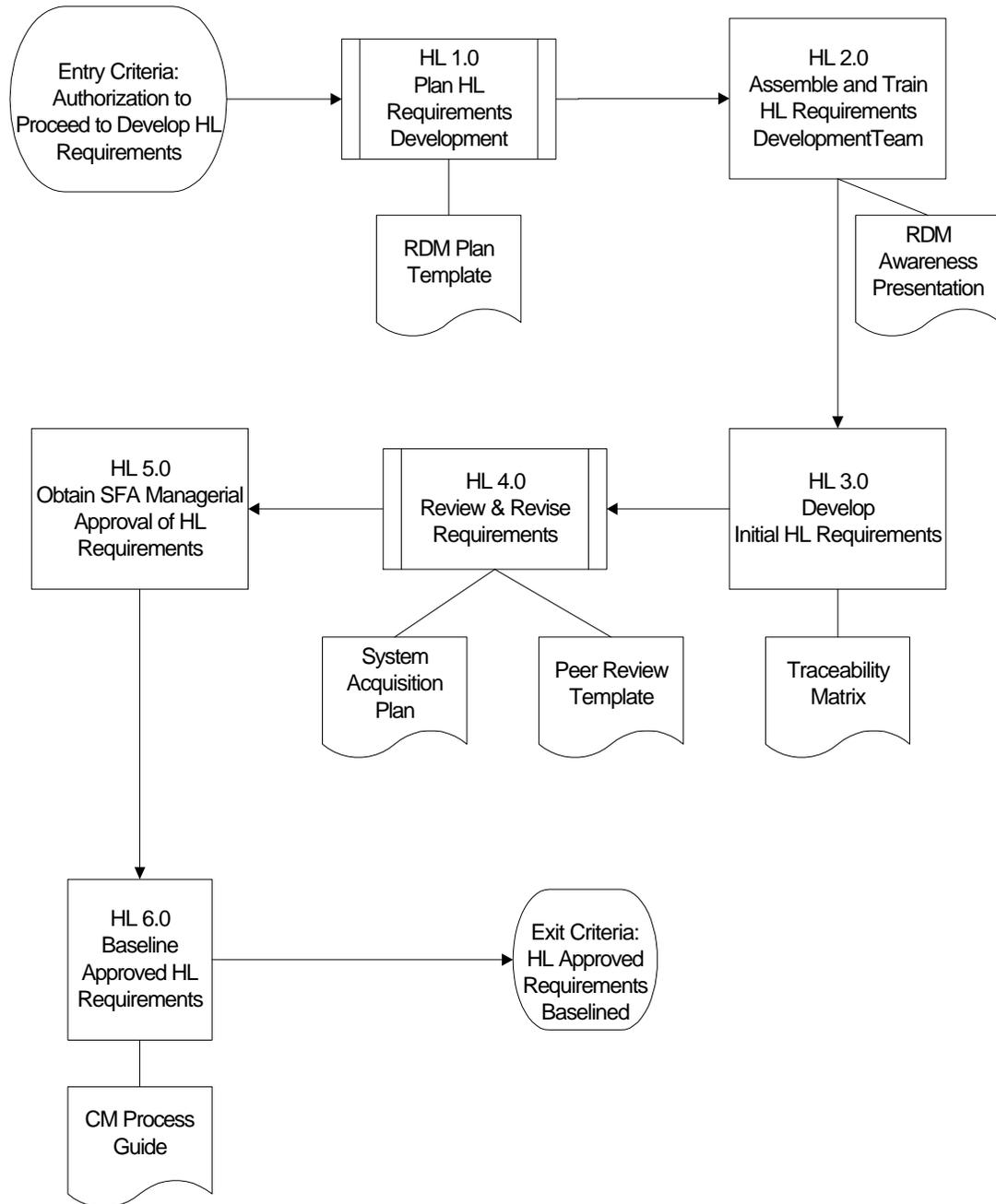
<<In this section define how requirements will be developed and managed for this acquisition. Detail specific work activities.>>

### 5.0 REQUIREMENTS DEVELOPMENT

<< Figure 5.0 presents a high level requirements flowchart that is intended to simplify understanding of the high-level requirement process. It is not meant to imply that a strict ordering or waterfall approach must be followed. Rather, project teams should focus on completing all the activities, tasks, and reviews, and use their judgment in the actual accomplishment of these tasks. Use the high level Requirements flow chart for the development of this section. Also state the location where the completed requirements will be stored, for example in a database or repository tool. >>



FIGURE 5.0 High Level Requirements Flowchart





## 5.1 IDENTIFY REQUIREMENT ATTRIBUTES

<< Assess your requirements with the attributes shown by answering the question with a yes or no. Use the questions below to analyze the attributes of requirements to determine if it is a “satisfactory” requirement. Document the attributes being used. Reference figure 5.1 below as a guide. >>

### Attributes:

- Feasible
  - Is the requirement feasible from a business process perspective?
  - Is the requirement feasible from a technical perspective?
  - Is the requirement feasible in the current environment?
  - Is the requirement feasible in the target environment?
- Verifiable
  - Are there data and measurements specified which can be tested to meet the system requirement?
- Accurate
  - Does the requirement correctly represent a capability required of the system to be built?
  - Does the requirement focus on the need, not a different solution?
  - Is the requirement stated in a brief, succinct, and concise manner?
- Non-ambiguous
  - Does the requirement have only one possible interpretation?
- Traceable
  - Is it easy to make a direct reference to each requirement such that issues, controlled changes and future design products can be traced to it?
  - Does the requirement trace to a business objective(s) and User Need (s)?
- Complete
  - Is every input to the system specified and does it have an appropriate specified output?
- Consistent
  - Does the requirement conflict with any other documented requirements?
- Understandable
  - Can non-computer specialists understand the requirement and the analysis of the requirement in the diagrams and notations used?



**FIGURE 5.1 Attributes Checklist**

REQUIREMENT	ATTRIBUTES								
	Feasible	Verifiable	Accurate	Non-ambiguous	Traceable	Complete	Consistent	Understandable	
<<Insert Requirement>>	<<Insert Yes or No>>								

**5.2 PROCEDURE**

*<<Describe how requirements will be developed. Identify specific activities for planning, evaluation, analysis and verification of requirements. Identify requirements project reviews to verify they meet the criteria established in 5.1 >>*



## 6.0 REQUIREMENTS MANAGEMENT

<<Describe how requirements are controlled. Use the different traceability matrices to report and track requirements and changes to baseline requirements. Reference the **RDM Process Guide Appendix** for traceability matrix forms.>>

### 6.1 PROCEDURES

<<Describe how the requirements baseline is established. **See RDM Process Guide.** Assign responsibility for developing and maintaining requirements traceability between system requirements and the contractor's system work products and services during the acquisition project. Use the traceability matrix to record and track changes to requirements.

### 6.2 REVIEWS

<<Describe the process for project reviews and project team reviews. This section should detail how management and other executive groups will approve requirements. This is to ensure management buy-in and to identify who is approving the requirements. The three types of reviews are listed below. **Reference the RDM Process Guide for the Peer Review process and the Configuration Management Process (CM) Guide.** >>

To ensure that Requirements Development and Management becomes institutionalized in SFA, the System Acquisition Capability Maturity Model (SA - CMM) emphasizes that measurements be taken and reviews be conducted to determine status of the activities and to verify implementation.

There are three types of reviews recommended:

- Senior Management
- Project Management
- System Quality Assurance (SQA)

Senior Management Review:

<<Reviews occur periodically for the benefit of senior managers who may be far removed from project activities. Requirements Development and Management are reviewed with senior management on a periodic basis. The objective of each review is to provide senior management with an awareness of the project's RDM activities and to gain management sponsorship for further process improvement. >>

Project Management Review:

<<Project Management Reviews occur periodically within the project team itself. RDM activities are reviewed with the project manager(s) on both a periodic and event-driven basis, to ensure effectiveness of RDM activities and to identify risk areas. All affected user groups and project teams will be represented. Issues not resolvable by project management will be refined by the appropriate internal team and elevated as a Change Request (CR) to the Enterprise Change Control Group (ECG) (if it is created in FY02) or to the Virtual Data Center planning group(VDC). If the issue is financial in nature then it will be elevated with the COTR to the CO. **Reference the CM Process Guide.**



SQA Review:

<< *SQA reviews also occur periodically within the project team. RDM activities, and resulting work products are reviewed by the SQA Group to verify that procedures are being followed, activities are being performed, and resulting work products are complete and conform to established standards. If problems are not adequately addressed within the project, they may be elevated to senior manager(s). Reference CM Process Guide >>*

**6.3 CHANGE MANAGEMENT**

<< *Describe how changes to requirements will be controlled. Define procedures for conducting impact analysis of new or changed requirements, including performance, cost, and schedule. Reference the CM Process Guide and RDM Process Guide. >>*

**6.4 STATUS REPORTING**

<< *Describe the reporting mechanisms used to report status of the requirements development process from the contractor, acquisition and the project. Define where the status report will be stored. Also identify the mechanisms used to provide on-going status of the requirements baseline and changes to the baseline during project execution. >>*

**6.5 SCHEDULE**

<< *Identify any dependencies that exist between the organization, other projects, the user, and the contractor. Identify how project workdays, deliverables, and milestones will be tracked. Define what mechanism will be used for scheduling and where it will be stored. Also identify schedule changes due to holidays, vacations, etc. >>*

**7.0 MEASUREMENTS**

<< *Describe the management and technical measurements to be collected (e.g. funds or effort expended, progress towards completion of key RDM milestones, etc.) Include assigned responsibility for collection and analysis of measurements. Reference Measurement and Analysis in the RDM Process Guide. >>*