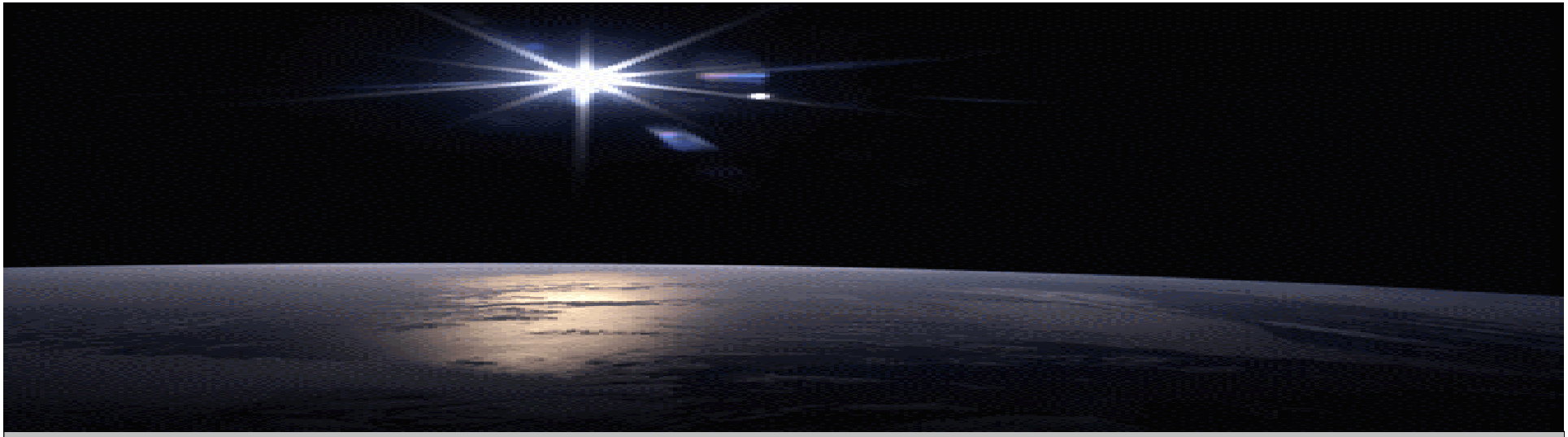


Requirements Development & Management Awareness Presentation

Agenda

- Systems Acquisitions using the Solution Life Cycle (SLC)
- Systems Acquisition and the SLC
- SA-CMM in the SLC
- SLC and SA-CMM
- What is a Requirement?
- RDM Definition
- RDM Objectives
- Benefits of RDM
- RDM in the SLC
- Developing Requirements
- Managing Requirements
- RDM Tools
- Review and Summary

Systems Acquisitions using the SLC

The SLC is a framework to guide a successful system acquisition from conception to deployment and support. The outline for the SLC is illustrated below.

This framework provides SFA with repeatable processes that allow project management to cut down on time, effort, and unnecessary steps by providing an outline to follow throughout the project.

Planning/ Managing	Acquisition Project Work Plan				
Phases	Vision	Definition	Construction	Deployment	Support
	Problem Assessment	System Requirements	Detailed Design	Deployed Solution	Production Services
Results	Solution Recommendation	Preliminary Design	Accepted Solution		

The Acquisition Project Work Plan manages the processes used and deliverables produced throughout the life of the project.

System Acquisition and the SLC

Vision	Definition	Construction	Deployment	Support

Phases

We begin with a Vision.

A business need has been identified that requires an assessment and solution recommendation.

A member of the SFA Management team is identified to oversee the Vision Phase processes and manage the solution effort from Vision to Support.

This SFA employee is the Executive Sponsor of the project.

SA-CMM in the SLC

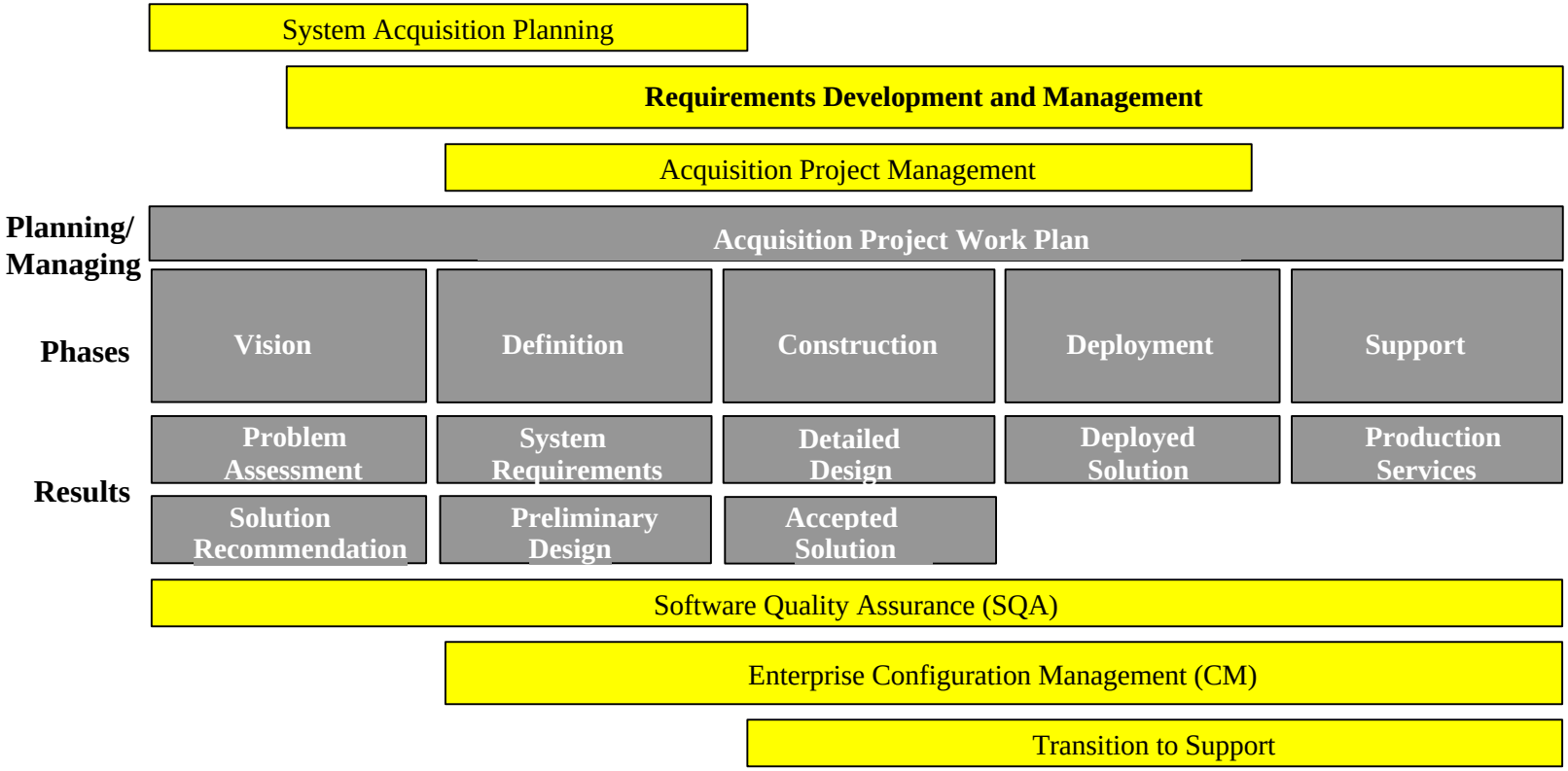
The System Acquisition Maturity Model (SA-CMM) is a Capability Maturity Model for organizational improvement.

The SLC is further enhanced by the SA-CMM.

SA-CMM identifies Key Process Area (KPAs) on which organizations should focus their efforts to ensure their systems acquisitions projects are run efficiently.

These KPAs align with different phases of the SLC. Defining and developing repeatable processes and procedures within each KPA will help SFA increase the efficiency of the SLC.

SLC and SA-CMM



What is a Requirement?

A requirement is a need that has to be met or satisfied.

SA – CMM defines two types of requirements

- Technical
- Non-Technical

Requirements types can be general or detailed

- General - High Level Requirement
- Detail – Low Level Requirement

Requirement types have different characteristic

- Attributes

What is RDM?

Requirements Development and Management (RDM) is developing and managing system requirements with end users and key affected groups in mind.

Requirements are:

- **Baselined**
- **Controlled**
- **Traceable**
- **Verifiable**

What is RDM?

RDM Involves:

Developing system requirements

Managing system requirements

In Developing – requirements are clear, complete, and baselined.

In Managing – requirements are controlled,monitored, and verified.

RDM Objectives

One aspect of RDM is to establish a common and clear definition of system requirements understood by all involved parties.

- The Goals of RDM are:

- Goal 1: Requirements are developed to establish a baseline for system engineering and management use.

- Goal 2: System plans, products, and activities are kept consistent with the requirements.

Benefits of RDM

RDM promotes the understanding of business and user needs.

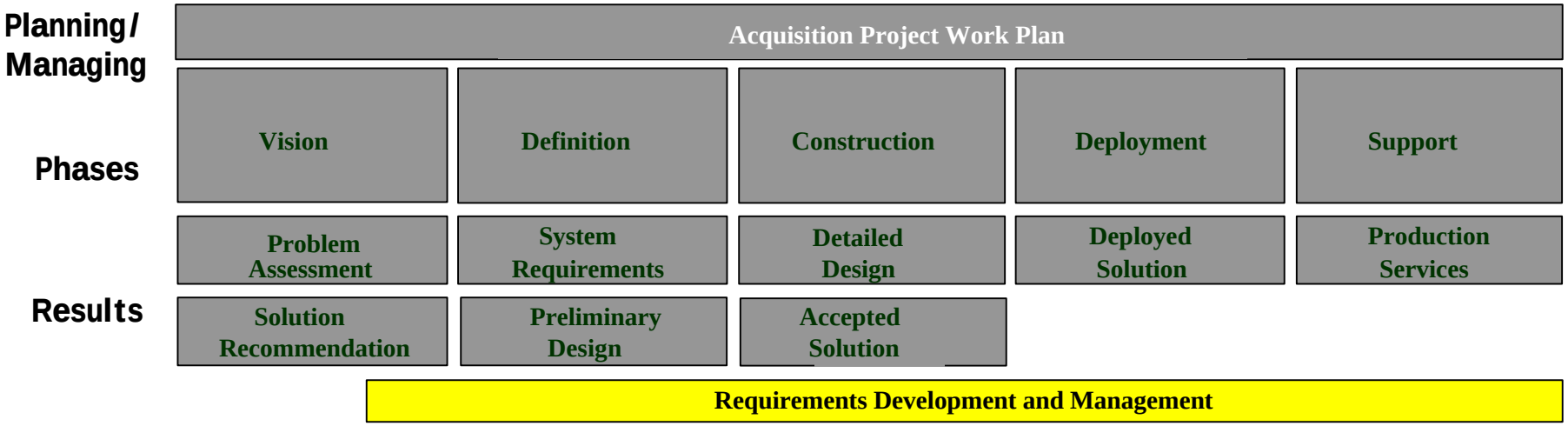
- Well developed and managed requirements decrease cost and time of system delivery.

- Results Include:
  - Well - formed requirements
  - Traceable to end user needs
  - Requirements are identified
  - Requirements are reviewed (approved and meet criteria)

RDM in the SLC

The Solution Life Cycle (SLC) provides a framework for the processes and procedures of Requirements Development and Management.

RDM begins during Vision ending with System/Solution retirement.



High Level Requirements

- General requirements that can be decomposed into detailed testable requirements.

- The RDM High Level Process Flow is used to develop high level requirements that are included into the business case during the Vision phase of the SLC.

See RDM Process Guide.

Low Level Requirements

- Is the functional level detailed requirement.
- The development of low level requirements is performed after approval of the business case and during the Definition Phase of the SLC.

See RDM Process Guide.

Managing Requirements

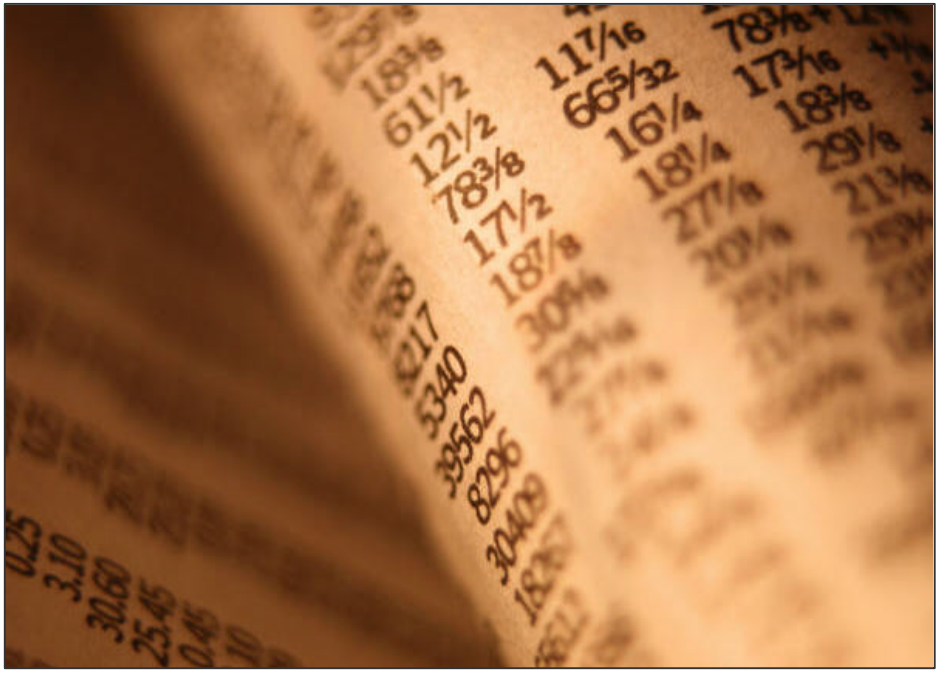
Requirements Management – is controlling and managing requirements by:

-Establishing baselines
-Establishing Change Control Processes
-Establishing Change Control Group
-Implementing Measurements Procedures
-Reporting of Status, Project Schedule, etc.

RDM Tools

Tools used to support the RDM process include:

- Policy
- Work Plan
- High Level Process Flow
- Low Level Process Flow
- Measurement and Analysis Job Aide
- Requirements Traceability Matrix
- Rational Suite



Review and Summary

Summary points include:

- SLC and SA-CMM
- RDM Definition
- RDM in the SLC
- Benefits of RDM
- Questions?