
Program Management Office Handbook

Guide to I.S. Policies, Procedures, Tools, and Frameworks

Updated: May 31, 2021

Document Summary

Overview.

This document defines the Program Management Office, or PMO, as established by the IS Strategy & Program Office group. Within this document are the PMO mission, charter, objectives, operating philosophy, organizational structure, and roles and responsibilities.

Intended Audience.

This document is the starting point for any associate who needs to work with projects that affect more than one department within COMPANY. More detailed information is available from the PMO web site on the intranet.

Contents: PMO Handbook

Introduction	1
Purpose	1
Intended Audience	1
Basic Concepts & Terminology	1
For More Information	1
1. A Generic Model of a PMO	1
Projects & Programs	1
Is it IS, or is it IT?	1
The PMO Generic Model: A Graphic Overview	2
Typical Functions of a PMO	3

2. The PMO: An Overview	5
Mission Statement	5
Objectives	5
Organization	5
Roles and Responsibilities	6
Functions	7
Goals and Performance Measures	8
PMO Governance	9
PMO Operations	10
2a. The PMO: Current & Future Priorities	11
Current Activities	11
Near-Term Priorities	11
Future Priorities	11
2b. The PMO: Deliverables	11
(1) IT Strategic Planning	11
(2) Project Planning & Tracking	12
(3) Project Management & the 8 Deliverables	13
(4) Active Project Tracking	14
(5) Project Management Framework	15
(6) Systems Development Life Cycle	18
(7) Project Time Entry	19
(8) Vendor Management	19
• Appendix 1 • Additional PMO Resources	20
Related Documentation of Processes, Standards & Guidelines	20
Training Presentations	20
Best Practices Repository	20
World-Wide Web Resources	20
• Appendix 2 • PMO Budget & Business Case	21
• Appendix 3 • I. S. Policies & Standards	22
Standards Terminology & Definitions	22
Example of Standards Terminology	23
• Appendix 4 • PMO Functions: Details	24

Introduction

Purpose

This document defines the **Program Management Office**, or **PMO**, as established by the IS Strategy & Program Office group. Within this document are the PMO mission, charter, objectives, operating philosophy, organizational structure, and roles and responsibilities.

Intended Audience

This document is the starting point for any associate who needs to work with projects that affect more than one department within COMPANY. More detailed information is available from the PMO web site on the intranet, under **Dept Homepages > IS > Project Admin** (or [click here](#)).

Basic Concepts & Terminology

The PMO has a number a wide-ranging responsibilities, and follows a number of best practices. These basic concepts are defined in the next section to provide a background for those unfamiliar with the workings of a PMO.

For More Information

If you have questions or comments about this document, and they are not answered on the PMO website, please contact the PMO by [email](#) or by phone. Randall Forester, the manager of the PMO, can be reached at (773) 399-4390.

1. A Generic Model of a PMO

This section will present a generic model of a program management office, including explaining the basic concepts & terminology used in this handbook. If you are familiar with this material, you can skip to Section 2, [The PMO](#). First, some basic terminology.

Projects & Programs

When we speak of the Program Management Office, what do we mean by a "program" and how is it different than a simple project? First of all, a project can be defined as "a temporary endeavor undertaken to create a unique product or service" (from the Project Management Institute's *Guide to the Project Management Body of Knowledge*). The word *temporary* distinguishes it from ongoing and repetitive work, that are known as *operations*, and it indicates that every project has a definite beginning and end.

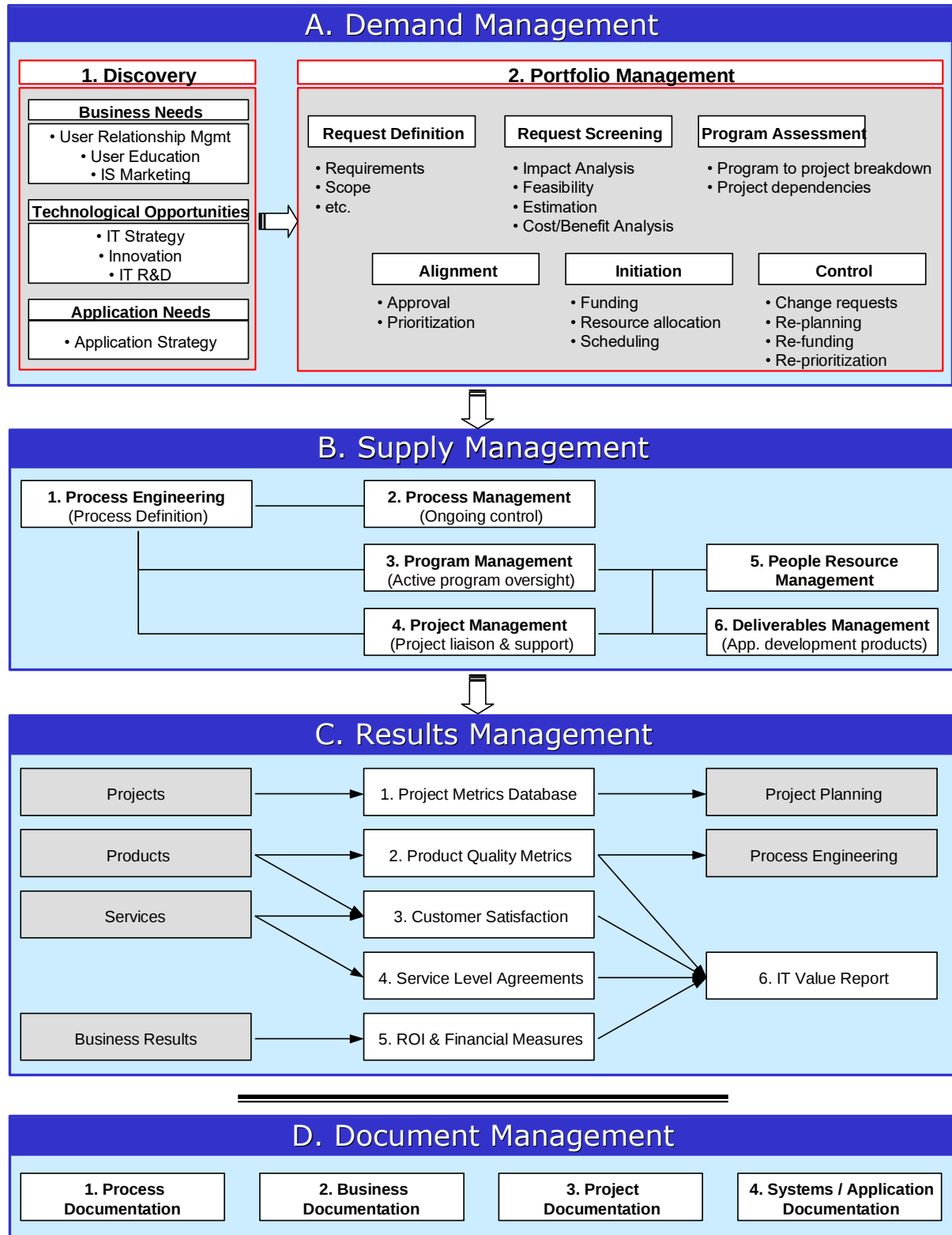
The term "program" is often used to refer to enterprise-wide mega-projects. That is, programs are either projects that cross organizational boundaries or that entail multiple projects that must be carefully coordinated together. For example, after a corporate acquisition, to merge the companies will involve a massive program — a large number of projects that will require careful coordination, and that will cross many business functions, such as Accounting, Advertising, HR, etc.

Is it IS, or is it IT?

In this handbook, when we refer to the Information Services department, we will abbreviate it as IS. When we use the abbreviation IT, for Information Technology, we are referring to the *function* that the IS department provides. Hence, we would say that "IS provides IT functionality to the corporation."

The PMO Generic Model: A Graphic Overview

The following diagram illustrates the areas of concern that a typical PMO would address. The diagram is further explained in the next sub-section. The original sources for this model comes from the Gartner Group and Keane (now AscendantOne).



Typical Functions of a PMO

Based on the preceding diagram, the typical functions of a PMO are shown below. For more information on each function listed, see Appendix 4, [PMO Functions: Details](#).

A. Demand Management

1. Discovery of Need for IT Services
 - a. Business-Identified Needs
 1. User Relationship Management
 2. User Education
 3. IS Marketing
 - b. Technological Opportunities
 1. IT Strategy
 2. Innovation
 3. IT Research & Development
 - c. Application Needs
 1. Application Strategy
2. Portfolio Management
 - a. Request Definition
 - b. Request Screening
 - c. Program Assessment
 - d. Alignment
 - e. Initiation
 - f. Control

B. Supply Management

1. Process Engineering (or Definition)
 - a. Benchmarking current processes
 - b. Best practices research
 - c. Definition of processes, standards & guidelines
 1. PMO policies & standards
 2. Project management framework
 3. SDLC (the "what")
 4. Techniques (the "how")
 5. Process automation
 - a. Tools evaluation, selection & implementation
 - b. Technical standards
2. Process Management
 - a. Process measurement
 - b. Process audit
 - c. Continuous process improvement
3. Program Management (ongoing oversight of potential & active programs)
 - a. Cross-functional & enterprise-wide projects (programs)
 - b. Parent-company interfaces
 - c. Ventures in "co-opetition" & disintermediation
4. Project Management (ongoing support to project managers)
 - a. Definition of project management processes, standards & tools
 - b. Definition of project reporting requirements & templates
 - c. Coordination of inter-project dependencies & interfaces
 - d. Project management "Center of Excellence"
 1. Project management training
 2. Providing of consulting to project managers
 3. Managing the project manager talent pool
 - e. Project auditing and intervention

5. People Resource Management (resource capacity planning & vendor management)
 - a. Resource capacity planning
 1. Resource sharing
 2. Resource utilization & balancing
 - b. Technical training
 - c. Vendor management
 1. Sourcing
 2. Procurement
 3. Source control & environment management
6. Deliverables Management (definition of application development deliverables)
 - a. Templates and checklists
 - b. Product quality standards

C. Results Management

1. Project metrics database
2. Product quality metrics
3. Customer satisfaction
4. Service level agreements
5. ROI & financial measures
6. Reporting on IT value

D. Document Management

1. Process Documentation
 - a. Best practices repository
 - b. Documentation standards (the standard for standards)
2. Business Documentation
 - a. Enterprise models
 - b. Corporate data model
 - c. Business domain models
3. Project Documentation
 - a. Project charter/definition
 - b. Project plans, estimates & schedules
 - c. Requirements & design documents
 - d. Approvals
 - e. Testing, conversion & implementation plans
 - f. Etc.
4. Systems / Applications Documentation
 - a. Screen designs & report layouts
 - b. Application code
 - c. User guides & training materials
 - d. Document control
 1. Storage & access
 2. Source control

2. The PMO: An Overview

Mission Statement

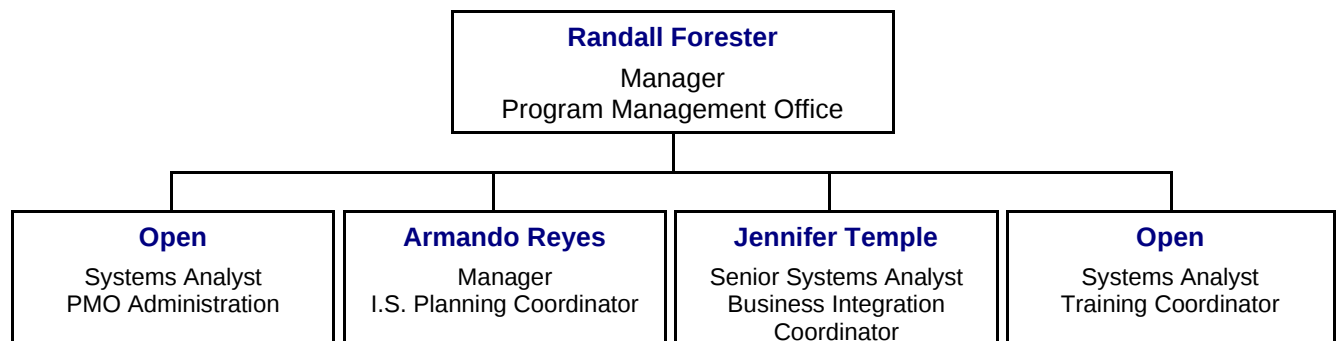
The mission of the Information Services (I.S.) PMO is to provide an approach to identify, prioritize, and align I.S. projects with U.S. Cellular's strategic objectives and to create policies, processes, tools, frameworks, and an organization to support the successful execution of those projects.

Objectives

Consistent with the above mission, the PMO will strive to accomplish the following objectives:

- Enhance the value of the I.S. organization by evaluating projects against strategic objectives and prioritizing those projects into a portfolio with the greatest contribution to the strategic plan
- Support the allocation of resources to the project portfolio and establish escalation procedures when necessary
- Assist projects in resolving cost and schedule challenges
- Manage interdependencies and deliver projects with cost and schedule predictability and efficiency
- Measure projects to gauge performance, realize benefits and identify opportunities for improvement (e.g., benefits, scope, cost, schedule, quality, risk)

Organization



Roles and Responsibilities

PMO Manager

- Accountable for the success of the program
- Builds alignment and consensus with the management team
- Facilitates issue resolution in a timely manner
- Provides direction and guidance to the PMO team
- Acts as owner to business leadership
- Coordinates all projects within Information Services
- Identifies and initiates PMO improvement opportunities
- Accountable for effectiveness of PMO processes and tools

Planning Coordinator

- Oversees operation of the PMO; assigns project responsibilities to owners
- Ensures project team compliance with PMO requirements
- Reviews program status to proactively identify and address potential slippage
- Schedules and facilitates SBU Checkpoint meetings for project/phase approvals, issue/risk escalation, and scope change request review
- Facilitates issue/risk resolution across project teams and within PMO
- Develops integrated plans as necessitated by project dependencies
- Develops and disseminates PMO communications to all stakeholders

Business Unit Coordinator

- Provide guidance to project teams on how to achieve successful integration
- Ensure new business processes are in alignment with strategic vision
- Coordinate cross-project tracking and reporting
- Manage cross-project issue logs
- Monitor cross-project risk management

Development & Training Coordinator

- Ensures project team composition is balanced
- Coordinate project resources
- Manage quality and consistency of project training and support
- Develop new organizational structures to support changing US Cellular vision
- Build and maintain skills inventory

PMO Administrator

- Ensures complete, concise, and up-to-date program information is readily available
- Gathers project metrics; updates and distributes program status reports
- Maintains logs of escalated issues/risks and change control requests
- Prepares materials for PMO status meetings; documents action items
- Tracks program expenditures, as required

Functions

The PMO is...	The PMO is not...
◆ Responsible for prioritizing all I.S. projects within U.S. Cellular in a timely manner ◆ A small group of dedicated resources organized to provide consistent: ◆ Alignment with business and strategic objectives ◆ Business case development and prioritization ◆ Performance reporting including benefits realization, cost and schedule status, etc. ◆ Responsible for seamless execution ◆ On time ◆ On budget ◆ With high quality predictable results ◆ Responsible for monitoring/oversight: ◆ Project/program planning ◆ All project/program linkages, dependencies, enablers ◆ Common data standards and business metrics ◆ Benefit realization ◆ Business case ◆ Issue management ◆ Risk identification and tracking ◆ Resource allocation ◆ Communications and coordination	◆ A centralized project control structure which adds unnecessary bureaucracy and impedes progress of value-adding projects ◆ A redundant project management effort focusing on day-to-day project management and business activities ◆ Responsible for benefits realization – business units must own the process ◆ An authoritative body which makes independent decisions on behalf of the Business Units that impact projects and programs

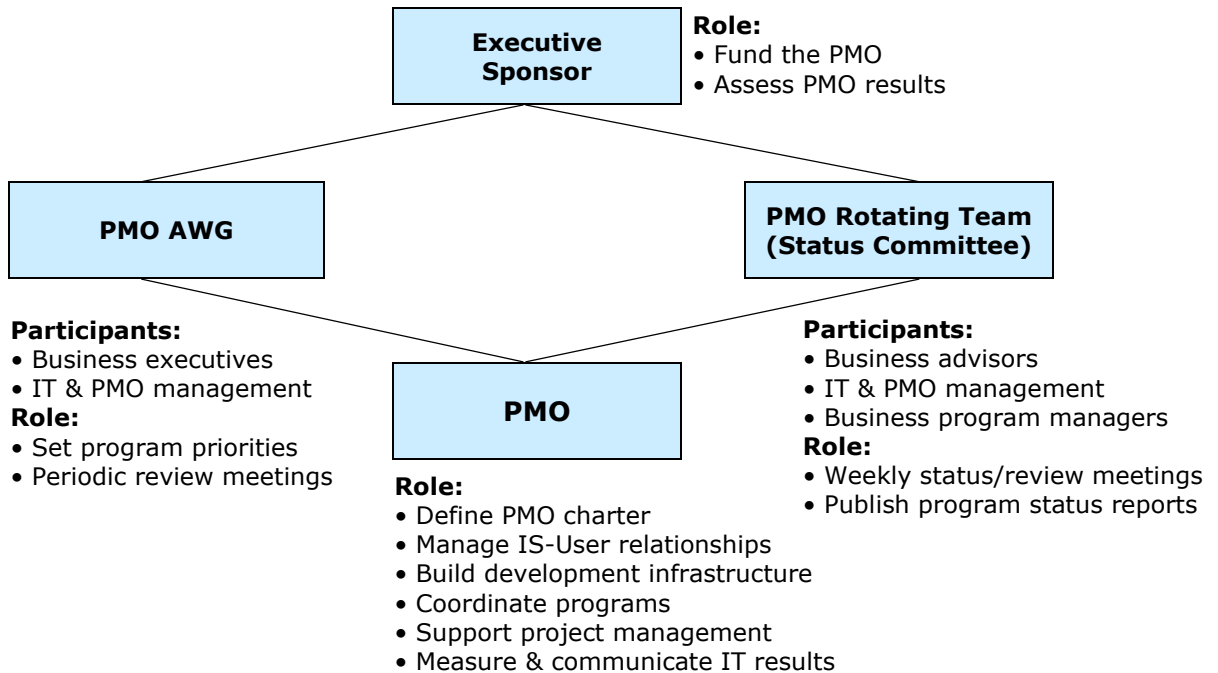
Goals and Performance Measures

Goal	Priority	Performance Measure	Key Influencers
Deliver Projects on Time & within Budget	High	• SVA realized vs. planned • Earnings Per Share realized vs. planned • Customer Service Excellence realized vs. planned • Operational Performance Index realized vs. planned • Employee Development Index realized vs. planned • Safety realized vs. planned	• PMO • IS Steering Committee • Business Sponsors
Deliver Projects on Time & within Budget	High	• Variance from estimates of cost and schedule	• Project Teams
Establish PMO & Utilize Processes & Tools	High	• Tools & processes in place & used by 100% of the customers/ projects • Number of projects outside of PMO circumventing processes • Various PMO process and quality measures	• PMO • IS Steering Committee • Project Managers
Eliminate Redundant Projects (e.g. Promote Cross-Business Unit Projects)	High	• % of projects that are cross-Business Units • % of projects requested but rejected	• PMO • IS Steering Committee
PMO Customer Satisfaction	Medium	• Project customer satisfaction survey results	• PMO • Project Teams • Business Sponsor • Project Managers
Clearly Articulate & Support PMO Master Schedule	Medium	• Creation of a PMO Master Schedule with clear communication to Business Units • Periodic reviews & updates made to the plan	• PMO • Business Unit Sponsors • CIO • IS Steering Committee
Reduce Cycle Time of Project Approval	Medium	• PMO process cycle times	• PMO • IS Steering Committee
Optimize Resource Utilization	Medium	• Staffing levels relative to best practice benchmarks	• PMO • Resource Managers • Project Managers

PMO Governance

Oversight. The PMO will have an Executive Sponsor who is responsible for its funding and mission. A PMO AWG will determine program priorities and review the status of existing programs on a periodic basis.

Status. A PMO Rotating Team will meet weekly to monitor those projects that are part of an active program, to ensure that all necessary inter-project coordination is occurring. The team is *rotating*, in that all project managers of program-related projects are on the team while that project is active; once the project completes, the manager no longer needs to meet weekly with the rotating team.



Responsibility & Assignment Matrix.

Process / Step	Personnel						
	PMO ES	PMO AWG	PMO RT	PMO	PM-P	CIO	IS
PMO Foundations							
1 Establish & maintain a business case for the PMO	D/S			(R)			
2 Define the PMO mission, charter, key metrics, etc.	A			(R)			
3 Communicate the PMO message to COMPANY	D/A			(R)			
4 Provide a single point of contact between & IS				(R)			
5 Communicate documentation & PMO results with users & IS	A	D/A		(R)		A	
PMO AWG Oversight							
6 Set up & chair periodic PMO AWG meeting; Publish status report		A	D	(R)			
6b Review, approve & set priorities of programs awaiting kickoff		(R)	D	D	D	D	
7 Assess the effectiveness of the PMO annually	(R)	D		D			
7b Prepare PMO's annual budget	D/S			(R)			
PMO Rotating Team & Status Reporting							
8 Set up & chair weekly PMO Rotating Team meeting; Publish status report			D/A	(R)			
8b Report status of active projects:			(R)				
(1) Adjust user involvement, if necessary		(R)					
(2) Adjust project plans & schedules, if necessary		(R)					
(3) Approve additional funds, if appropriate		(R)					

Legend: (R) - Primary Responsibility S - Sign off or approve A - Agree to
 D - Discuss, Consult, Provide input to C - Copy, Keep informed

PMO ES - PMO Executive Sponsor PMO AWG - AWG PMO RT - PMO Rotating Team
 PMO - Program Management Office PM-P - Project Manager of a program-related project
 CIO - Chief Information Officer IS - The IS Department

PMO Operations

Responsibility & Assignment Matrix.

Process / Step	Personnel						
	PMO ES	PMO AWG	PMO RT	PMO	PM-P	CIO	IS
A1. Demand Management: Discovery							
1. Establish lines of communications between IS & key business users				(R)		D	
2. Develop user education materials & run orientation sessions				(R)		D	
3. Develop mechanisms for marketing IS's capabilities & successes				(R)		D/S	
4. Define a process for incorporating new technology into the IT strategy				(R)			
5. Define & maintain processes & procedures for IT R&D and innovation				(R)			
6. Analyze current applications & develop an applications strategic plan		D/C		(R)			D
A2. Demand Management: Portfolio Management							
1. Maintain the process for communicating demands to IS (ISR & other)				(R)		D/A	
2. Define & maintain policies & procedures for portfolio management:				(R)		D/A	
(a) Request documentation (Project Definition)				(R)		D/A	
(b) Request screening (impact analysis, feasibility, cost/benefit)				(R)		D/A	
(c) Program assessment (projects & dependencies)				(R)		D/A	
(d) Alignment, approval & prioritization				(R)		D/A	
(e) Initiation (funding & scheduling)				(R)		D/A	
(f) Control (change orders)				(R)		D/A	
3. Link demands to the IS Strategic & Tactical Plans		D/C		(R)		D/A	
B. Supply Management							
1. Define & implement processes for delivering IT services (SDLC, Standards, Procedures, Tools, etc.)				(R)		D/A	D/A
2. Manage, monitor & maintain the processes				(R)			
3. Manage the cross-functional (PMO) programs		D	D	(R)	D		
4a. Define & maintain project management processes & standards				(R)	D/A		
4b. Define & maintain project reporting requirements & templates				(R)	D	D/A	
4c. Coordinate the dependencies between projects				(R)	D		
4d(1). Coordinate project management training				(R)	D		
4d(2). Provide project management consulting & support				(R)			
4e. Provide independent audit of projects as required				(R)		A	
5a. Coordinate resource capacity planning				(R)	D		
5b. Coordinate technical training				(R)			D
5c. Define & maintain vendor management policies & procedures				(R)		D/A	
6a. Develop & maintain deliverable templates & checklists				(R)			D
6b. Define product quality standards for deliverables				(R)			D/A
C. Results Management							
1. Define, develop, implement & maintain a project metrics database				(R)	D	D/A	
2. Define, develop, implement & maintain a product quality database				(R)		D	D
3. Define, develop, implement & maintain a customer satisfaction program				(R)	D	D/A	
4. Implement service level agreements for applications development				(R)	D	D/A	
5. Determine & implement financial reporting requirements				(R)	D	D/A	
6. Develop & distribute the IT value report				(R)	D	D/S	
D. Document Management							
1a. Develop & communicate the best practices database				(R)	D		D
1b. Define & maintain the standard for documenting processes				(R)		A	
2. Determine requirements & coordinate development of business models				(R)	D		D
3. Maintain the standards for project documentation				(R)	D	D	D
4. Re-engineer the requirements for systems & applications documentation				(R)	D		D

2a. The PMO: Current & Future Priorities

The PMO has been in place for some time, and a number of programs and projects are active, with a number of new initiatives recently begun.

Current Activities

The PMO is currently focusing on these initiatives:

- Project Initiation
- TDS Financial Roadmap
- Portfolio Management
- Vendor Management

Near-Term Priorities

The efforts for 2003 will be focused on:

- "Time to Market" (SDLC Re-Engineering)
- PMO Handbook
- PMO Priority Determination

Future Priorities

The establishment of new areas of PMO responsibilities, with priorities as set by IS management.

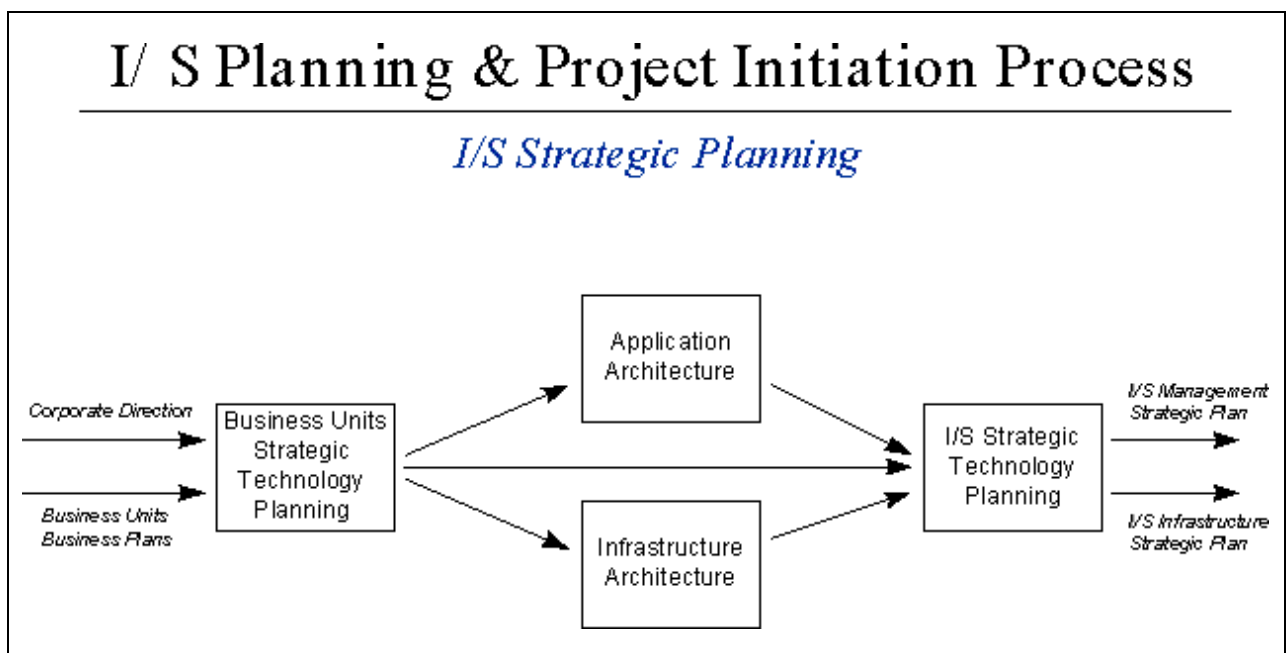
2b. The PMO: Deliverables

The PMO has defined a number of its deliverables, and some are currently underway. Following are each of these deliverables and their current status.

(1) IT Strategic Planning

Currently on the Intranet, is a description of the IS strategic planning process. Its [home page](#) is shown below.

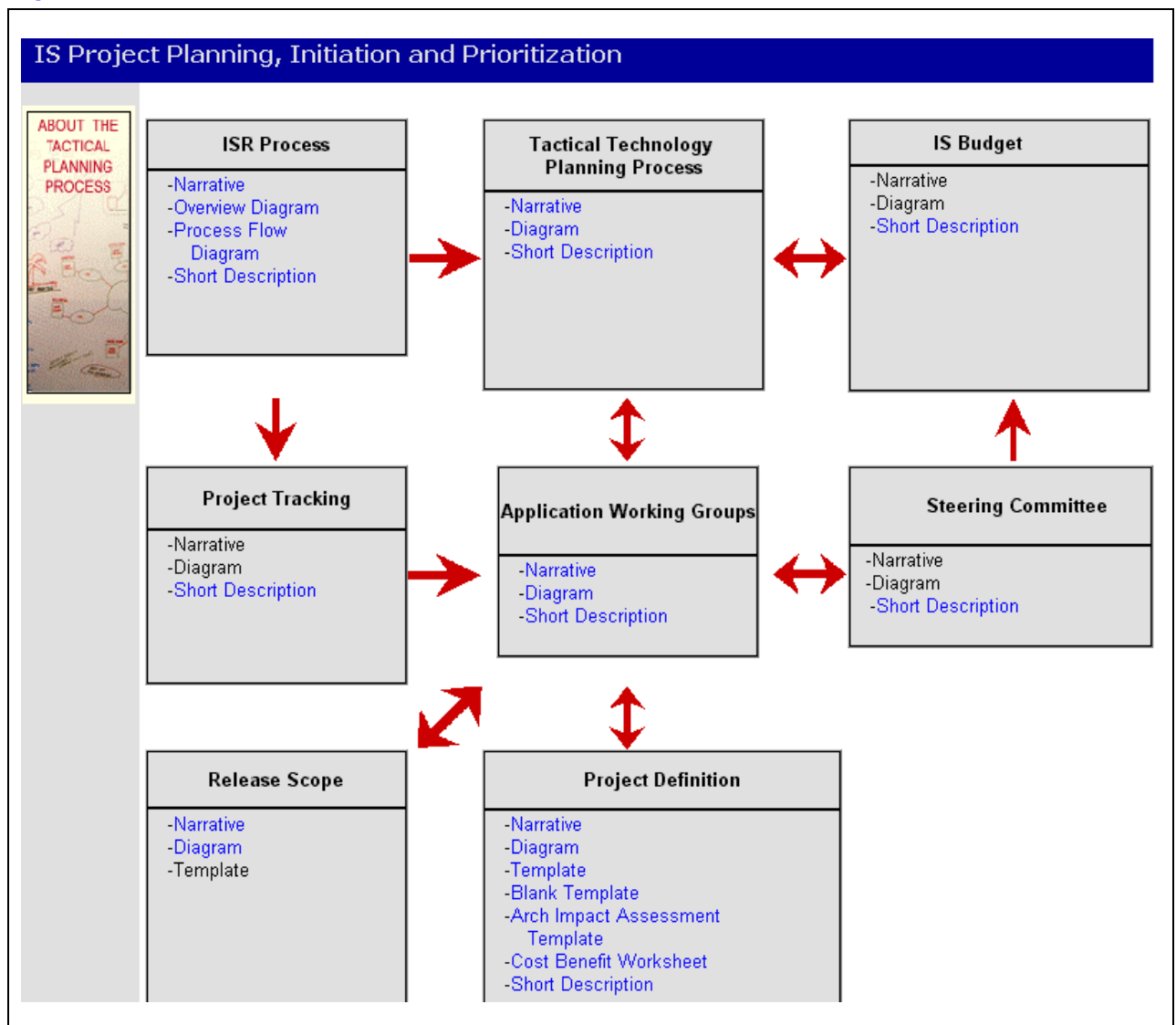
Graphic Overview



(2) Project Planning & Tracking

Currently on the Intranet, is a description of the IS project planning & tracking process. Its [home page](#) is shown below.

Graphic Overview



(3) Project Management & the 8 Deliverables

Currently on the Intranet, is a description of the IS project management process. Its [home page](#) is shown below.

Graphic Overview

	
Project Management Deliverables	
Project Definition Document	▪ Description ▪ Templates: ▪ With Instructions ▪ Without Instructions ▪ Architecture Impact Assessment ▪ Financial Impact of Project Worksheet
Project Change Order	▪ Description ▪ Template
Project Plan	▪ Description ▪ Templates: ▪ For MS Project Users Only: MS Project ▪ For Others: MS Excel
Progress/Status Report	▪ Description ▪ Template
Risks and Issues	▪ Description ▪ Templates: ▪ MS Excel ▪ MS Word
Implementation Plan	▪ Description ▪ Detailed Implementation Plan: ▪ For MS Project Users Only: MS Project ▪ For Others: MS Excel ▪ Contingency Plan: ▪ For MS Project Users Only: MS Project ▪ For Others: MS Excel ▪ Installation Contact List
Post Project Review	▪ Description ▪ Templates: ▪ Post Project Review ▪ Lessons Learned Details
Project Folder	▪ Description

(4) Active Project Tracking

Currently on the Intranet, is a description of the IS project tracking process. Its [home page](#) and sub-pages are shown below.

Graphic Overview

IS Project Tracking

[ISR/AWG Reports](#)
[Tactical Plan Reports](#)
[Time Reporting / 2002 Project Numbers \(Excel\)](#)

Information Service Request (ISR) Repository Reporting

View / Print a specific ISR Description... [click here](#)

View / Print the AWG ISR Master List... [click here](#)

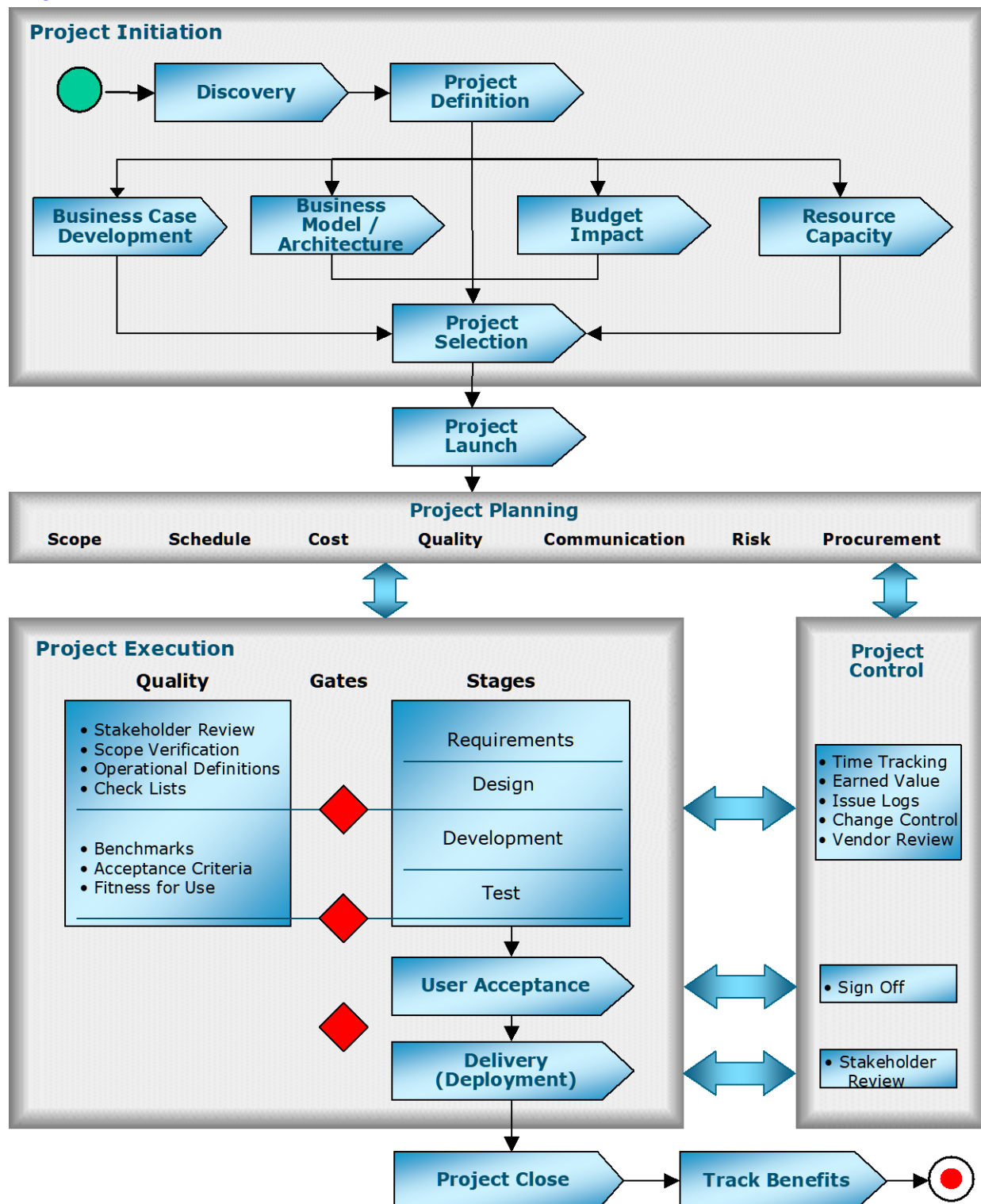
View / Print the ISR Under Investigation List... [click here](#)

	A	B	C	D	E	F	G	H	I	J
	COST	IS	PROJECT	PROJECT	PROJECT	CAPITALIZED	TAC PLAN	START	END	
	CENTER	OWNER	DESCRIPTION	SIO NUMBER	NUMBER	/ NON-CAP	NUMBER	DATE	DATE	
3	175074	Eadon	CARES Data Archival - Development	ZCARESDATA	CRE017	CAPITALIZED	TAC310			06/30/02
4			CARES Data Archival - Training & Implementation	ZN-CARESDATA	CRE064	non-cap	TAC310			
5	175074	Eadon	A/P Imaging Support & Maintenance	ZAPIMAGSPT	CFA01A	non-cap	TAC270			
6	175075	Cooper	AdHoc Reporting (process)	ZMADHOC	CMR00R	non-cap	TAC236			
7	175074	Bruno	AIM Phase 2.3- Development	ZC-AIM2.3	CSL006	CAPITALIZED	TAC301	04/19/02	07/28/02	
8	175074	Bruno	AIM Phase 2.4- Development	ZC-AIM 2.4	CSL008	CAPITALIZED	TAC301	04/19/02	10/20/02	
9			AIM Phase 2.3 & 2.4 - Training & Implementation	ZN-AIM2.3-4	CSL007	non-cap	TAC301			
10	175136	Hudak	Application Architecture Support	ZAPPARCH	CEA01B	non-cap	TAC235			
11	175049	Stasik	Associate Training	ZATRAING	CAA00T	non-cap	ADMIN			
12	175122	Varga	BREW-IP Billing - Preliminary Project Stage	ZN-BREW OTA	CRE065	non-cap	TAC362			
13	175133	Vizza	Burke Support & Maintenance	ZS-BURKE SUP	CNG009	non-cap	TAC272			
14	175133	Vizza	Business Improvement Tracking Support & Maintenance	ZS-BUS IMPR	CRE056	non-cap	TAC300			

(5) Project Management Framework

In November 2002, a draft framework for managing projects was initiated. Its overview diagram is shown below.

Graphic Overview



Supporting narrative

Supporting the above diagram is a narrative as shown below (only partially shown).

Discovery

Discovery is the process of identifying compelling business needs and opportunities and bundling those needs logically into potential projects and programs.

Inputs	Tools & Techniques	Outputs
(1) Business Strategy (TAC Plans) (2) Enhancement Needs (ISR) (3) Corporate Initiatives (i.e. WNP) (4) Ad Hoc Requests (5) Problem Tickets (REMEDY) (6) Business Models	(1) Application Work Group (AWG) (2) Annual Tactical Planning/Budgeting	(1) Compelling Business Needs (2) Strategic Aligned Programs/Projects (3) Strategic Aligned CARES Releases

Project Definition

Project definition is the process of identifying the project sponsor and developing the project charter. The project charter documents the business need or opportunity, along with the recommended or alternative solution to satisfy the business need. The overall approach for the project is also defined.

Inputs	Tools & Techniques	Outputs
(1) Strategic Aligned Programs/ Projects (2) Strategic Aligned CARES Releases (3) Business Process Owners	(1) EVP Approval (2) Standard Project Definition Template	(1) Project Sponsor (2) Project Definition

Business Case Development

Business case development is the process of identifying and measuring value or attractiveness of a potential project to the enterprise based upon costs and benefits.

Inputs	Tools & Techniques	Outputs
(1) Project Sponsor (2) Project Definition	(1) TDS Standard Business Case (2) Comparative approaches (2) Scoring models (3) TDS Financial Model (ROI, Cost/Benefit)	(1) Business Case

Business Model / Architecture

Business model / architecture assessment determines the fit of the potential project with the Enterprise Business Model and Technology Architecture (application, data, and infrastructure).

Inputs	Tools & Techniques	Outputs
(1) Project Definition (2) Enterprise Business Model (3) Enterprise Technology Architecture	(1) Business Modeling (2) Architecture Governance Committee	(1) Business Model Impact Assessment (2) Technology Architecture Impact Assessment

Supporting roles & responsibilities

Also supporting the project framework is a roles & responsibilities matrix as shown below (only partially shown).

Overall Project Framework: Responsibilities

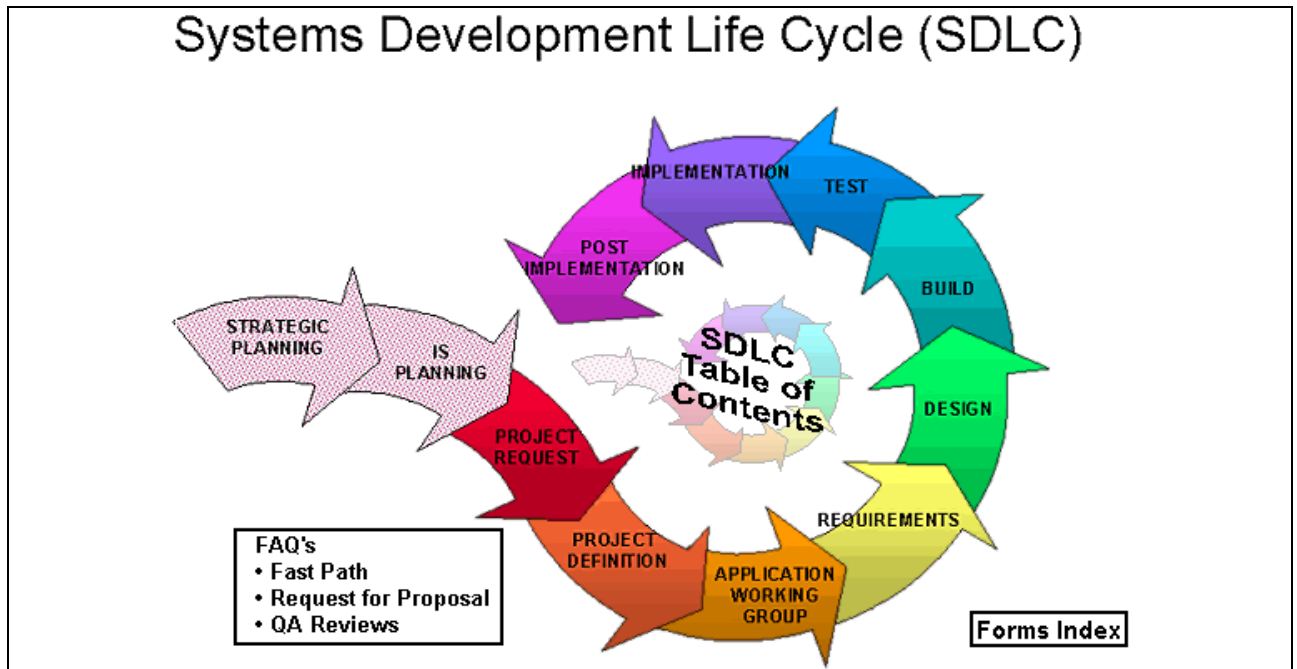
Phases	Stakeholder	Support Organizations													
		Customer / Requester	Project Sponsor	Project Owner	Operations Integration	AW/G	PMO	Steering Committee	Project Manager	Project Team	Infrastructure	Architecture	ADS	AQM	BAI
• Discovery		(R)	S	A	D	D	D								
• Project Definition		D	A	(R)	D	A	D								
• Business Case		D	S	(R)	D	A	D	C							
• Resource Capacity		D	A	(R)	D	A	D								
• IT Architecture			C	D/A			D					(R)			
• Project Selection						D/A	D	(R)							
• Project Launch							D		(R)						
• Project Planning			C	C			D	C	(R)		D	D	D	D	D
• Project Execution										(R)	D	D	D	D	
• Project Control			C	C/A				C	(R)						
• User Acceptance		A	C	S				C	(R)	D					
• Delivery		A	A	A					(R)	D	A	A		D	D/A
• Project Close		C	C	D/C	C	C	C		(R)						
• Track Benefits		C	S	(R)	C	C	C	C							

Legend: (R) - Primary Responsibility S - Sign off or approve A - Agree to
 D - Discuss, Consult, Provide input to C - Copy, Keep informed

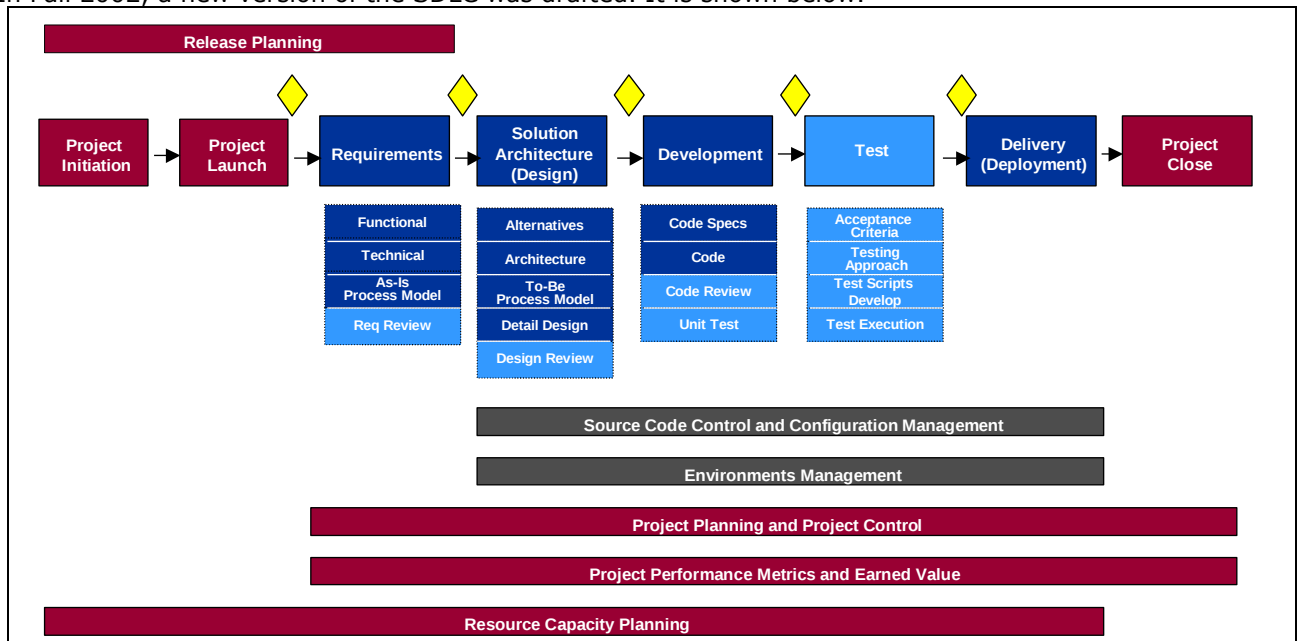
(6) Systems Development Life Cycle

Currently on the Intranet, is a description of the IS SDLC. Its [home page](#) is shown below.

Graphic Overview



In Fall 2002, a new version of the SDLC was drafted. It is shown below.



Note that this diagram is but one of the variants developed. This one specifically documents the approach known as the "waterfall." Not shown (but available on the web site) are variants for rapid development, incremental development, and 3rd-party contract programming.

(7) Project Time Entry

Introduction

Currently on the Intranet are procedures for IS Time Entry. Its [home page](#) is shown below.

IS Time Entry Procedures

Who: Every employee within IS.

What: Use TDS/Time Entry system to charge hours to projects.

When: **All employees:** For current pay period, by 8 P.M. Central Time of the 2nd business day after the close of the pay period.
Managers: Review SAP reports and communicate any changes to Payroll by 8 PM of 4th business day after the close of the pay period.

Why: To help project managers manage current projects and create more accurate estimates in the future.

How: Use the following steps:

- 1** Login to the TDS/Time Entry System.
 - From the Cellsite home page, select the option "Time Sheets" from the "Take Me To" drop-down menu.
 - Enter your Personnel Number (same as employee id or associate number).
 - Enter your PIN. If you are a first-time user and do not have a PIN, enter the last 4 digits of your SSN. You may change your PIN at any time. If you forget your PIN, call the Help Desk (x3888) to have it re-set.
- 2** Choose the Project Time Entry selection. [Do NOT select Standard Time Entry.]

(8) Vendor Management

Introduction

To be written.

● Appendix 1 ● Additional PMO Resources

Related Documentation of Processes, Standards & Guidelines

Following are links to documents on CellSite which provide more detail on the topics addressed in this handbook.

[The PMO Home Page](#)

[The Project Management Home Page](#)

[Application Development Life Cycle Home Page](#)

[IS Standards Home Page](#)

Training Presentations

The training presentation used for introducing the PMO is available on CellSite. Click [here](#).

Best Practices Repository

The repository of information on PMO & project management best practices is available on CellSite. Click [here](#).

World-Wide Web Resources

The following links provide additional information for further research.

• Appendix 2 • PMO Budget & Business Case

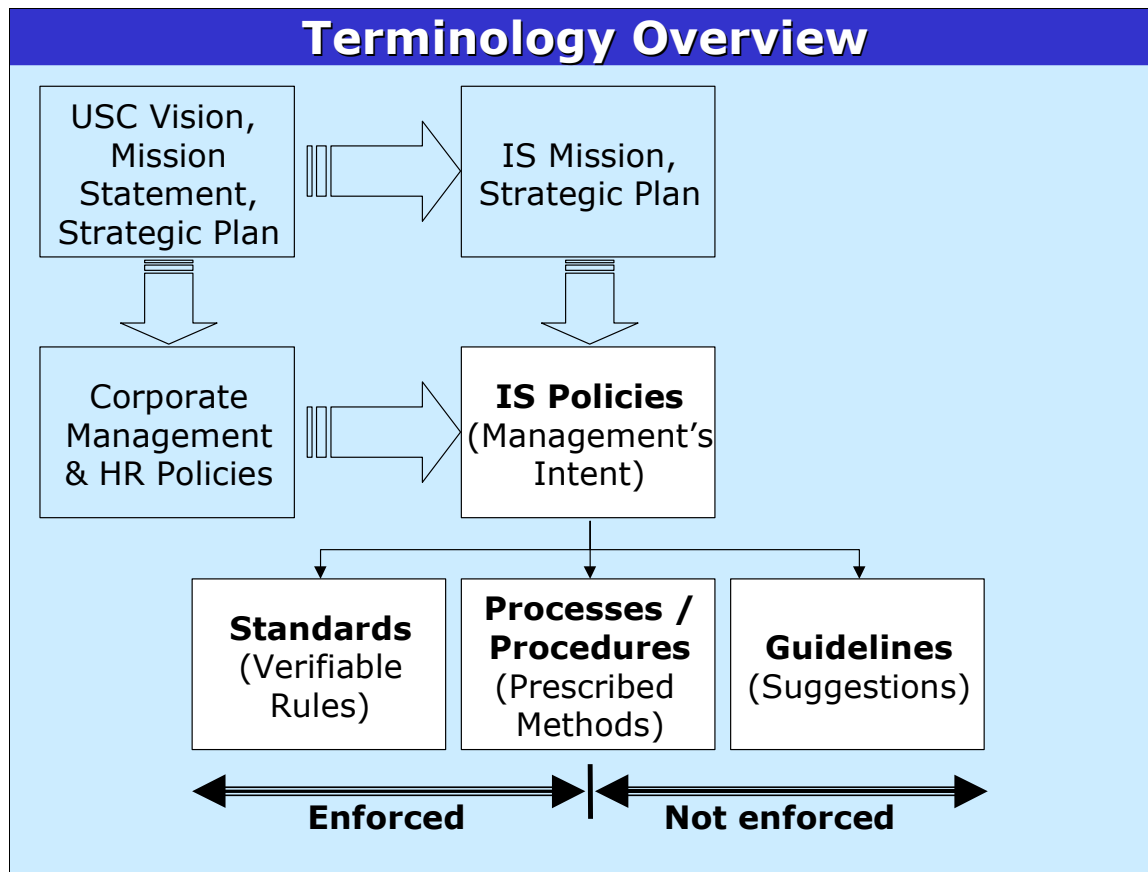
TBD.

• Appendix 3 • I. S. Policies & Standards

It is important that IS have a clear set of policies, standards, and procedures. Collectively, these will sometimes be referred to, simply, as "standards." This document defines the relevant terminology and provides an example.

Standards Terminology & Definitions

The following diagram provides an overview of the IS Policies & Standards, showing how they fit into the corporate picture.



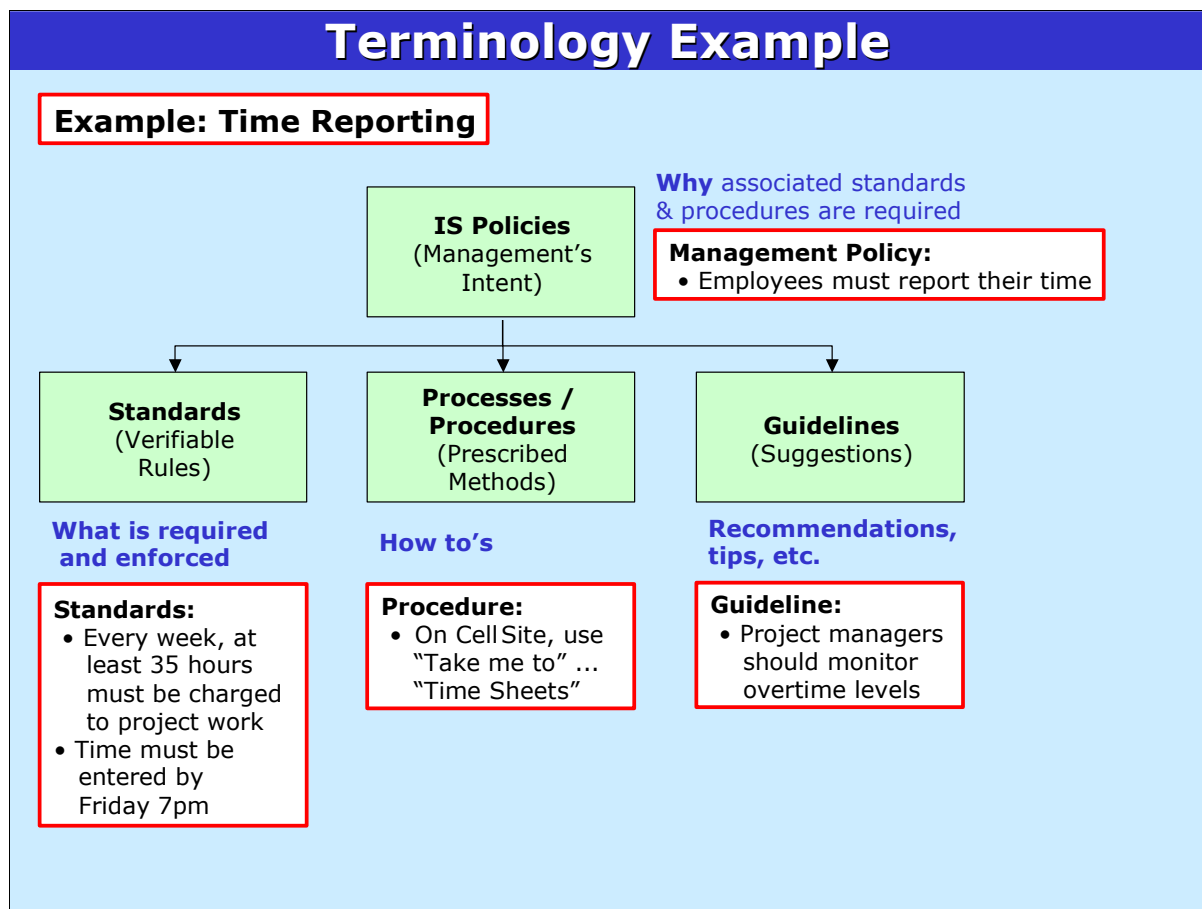
From COMPANY's strategy is derived a set of corporate management and HR policies which apply to IS. IS's own strategy, built to support COMPANY's, also influences its policies, yet may go into more specifics, such as how to acquire or build technical talent. IS policies are declarations of IS management's intent in all key areas.

Supporting the IS policies are a set of documents that set forth parameters that apply to the job tasks of IS associates. Certain of these documents are called "standards" which are binding (or mandatory) on all IS associates performing the task of concern. On the other end, are documents called "guidelines" that provide supplementary materials, such as tips, which may be helpful, but are not binding. Key processes and procedures are also documented, and will be identified as mandatory when they are.

Policies, standards, and mandatory processes and procedures are enforced; Guidelines are not enforced.

Example of Standards Terminology

The following diagram gives an example of the IS Policies & Standards, showing how the Time Reporting process contains standards, procedures/processes and guidelines.



In this example, the policy details management's intent (that associates report their time). There are two standards, or verifiable rules, namely that every week 35 hours must be reported, and entered by 7pm Friday. Note that all policies and standards are defined in clear enough terms that it can be easily determined whether they have been met or not.

The procedure in this example details how to go about meeting the standard. In this case, there is only one way to accomplish the task (via CellSite) so enforcement is not an issue -- if the standard was met, the procedure had to have occurred.

There is a sample guideline or recommendation which in this case suggests that the project manager should monitor overtime levels. Note (1) While this is usually a good idea, there may be situations where it is not needed, and (2) this idea is not stated in verifiable terms. For these reasons, it is a guideline, not a standard.

● Appendix 4 ● PMO Functions: Details

The PMO functions listed in Section 1 are further elaborated here.

A. Demand Management Controlling the requests made for IT services	
1. Discovery of Need for IT Services	Ensuring that all potential needs are surfaced before prioritization is done
a. Business-Identified Needs	Eliciting business needs from the organization
1. User Relationship Management	Providing an IT point-of-contact to all key business areas
2. User Education	Helping users understand how to effectively use IT, & managing the user requests
3. IS Marketing	Making known to the business what IT can do for them
b. Technological Opportunities	Identifying technological opportunities that could benefit the business
1. IT Strategy	Ensuring that the IT strategy includes appropriate technology-driven initiatives
2. Innovation	Promoting innovative uses of technology & defining the processes for suggesting them & assessing their feasibility
3. IT Research & Development	Defining the responsibilities & processes for innovation & technology R&D
c. Application Needs	Identifying applications that need attention
1. Application Strategy	Developing a long-term application strategy for legacy apps, e.g. sun-setting, etc.
2. Portfolio Management	Determination of the projects that will be worked on, and ensuring that they are aligned with the business' priorities
a. Request Definition	Defining the request definition process
b. Request Screening	Defining the request screening process
c. Program Assessment	Defining the process for breaking programs into appropriate projects & identifying inter-project dependencies
d. Alignment	Defining the business alignment process
e. Initiation	Defining the kickoff process for programs & projects
f. Control	Defining the portfolio control processes

B. Supply Management

Defining & managing the processes for the supply of IT services

1. Process Engineering (or Definition)	Defining processes to ensure that high-quality products are delivered
a. Benchmarking current processes	Measuring current processes against corporate and industry best practices
b. Best practices research	Documenting & providing technical & reference information on best practices
c. Definition of processes, standards & guidelines	Development & maintenance of standards/guidelines for IT processes & tools
- PMO policies & standards	Defining the role of the PMO & its relationship to IT strategic & tactical planning
- Project management framework	Definition & maintenance of PM processes & standards, and evaluation & selection of PM tools
- SDLC (the "what")	Definition & maintenance of the systems development life cycle, its variants & related standards
- Techniques (the "how")	Definition & maintenance of recommended SLDC technical procedures
- Process automation	Automating the development process
. Tools evaluation, selection & implementation	Evaluating & selecting appropriate tools
. Technical standards	Definition & maintenance of standards for tools
2. Process Management	Maintaining existing processes to meet changing development needs
a. Process measurement	Measuring process effectiveness
b. Process audit	Selective review of problematic processes
c. Continuous process improvement	Ongoing improvement of processes, standards & tool usage
3. Program Management (ongoing oversight of potential & active programs)	Managing individual <i>programs</i> & monitoring individual <i>projects</i> within a program
a. Cross-functional & enterprise-wide projects (programs)	Overseeing or direct managing of all programs
b. Parent-company interfaces	Managing projects that relate to parent-company interfaces
c. Ventures in "co-opetition" & disintermediation	Managing projects that relate to competitor collaboration, or marketplace restructuring, such as the replacing of agents or stores with e-commerce web sites

4. Project Management (ongoing support to project managers)	Supporting the organization's project managers
a. Definition of project management processes, standards & tools	Definition & maintenance of PM processes & standards, and evaluation & selection of PM tools
b. Definition of project reporting requirements & templates	Definition & maintenance of status reports provided to the users & to IS management
c. Coordination of inter-project dependencies & interfaces	Ensuring that the identified project connections are being address appropriately
d. Project management "Center of Excellence"	Enhancing the organization's project management expertise
- Project management training	Procuring or providing PM training
- Providing of consulting to project managers	Providing PM assistance when requested
- Managing the project manager talent pool	Maintaining a ready pool of project managers & loaning or assigning them to new projects (also known as a PM Competency Center)
e. Project auditing and intervention	Performing independent project audits when requested
5. People Resource Management (resource capacity planning & vendor mgmt)	Defining requirements, processes & tools for effective managing of people, including vendors
a. Resource capacity planning	Developing processes for resource capacity planning & resource sharing
- Resource sharing	
- Resource utilization & balancing	
b. Technical training	Defining policies & procedures for technical training; Coordinating procurement
c. Vendor management	Defining the policies & practices for vendor & contract management
- Sourcing	Setting the policies for determining when to use outside sourcing and vendor selection
- Procurement	Defining the policies & procedures for procuring outside personnel services
- Source control & environment management	Establishing procedures for managing code and environments when using outside contractors
6. Deliverables Management (definition of application development deliverables)	Defining the standards & quality metrics for all development deliverables
a. Templates and checklists	Definition & maintenance of templates & quality-control checklists for deliverables
b. Product quality standards	Definition & maintenance of quantifiable measures for assessing deliverable quality

C. Results Management Monitoring & measuring the effectiveness & efficiency of IT products & services	
1. Project metrics database	• Building & using a database of project metrics to assist in future project estimating
2. Product quality metrics	• Building & using a database of metrics on product quality for trend analysis & process improvement
3. Customer satisfaction	• Defining the processes for measuring & reporting on customer satisfaction with IS's products & services
4. Service level agreements	• Monitoring & measuring levels of service provided & satisfaction achieved
5. ROI & financial measures	• Defining the procedures for tracking & reporting on the financial aspects of programs & projects
6. Reporting on IT value	• Defining and demonstrating the business value of IT back to the business & evaluating trends
D. Document Management Defining the standards for key IT documents & managing their development	
1. Process Documentation	• Ensuring all processes are documented & communicated effectively
a. Best practices repository	• Building & maintaining an online repository of practical information to support the improvement of project management & applications development techniques & skills
b. Documentation standards (the standard for standards)	• Defining the structures & formats for the process documentation
2. Business Documentation	• Ensuring that appropriate business documentation is developed, maintained & readily-accessible in a standard format to support business process understanding & re-engineering
a. Enterprise models	• Defining the standards for documenting the enterprise models, such as the application & infrastructure architectures
b. Corporate data models	• Defining the standards for documenting the enterprise data models & schemas
c. Business domain models	• Defining the standards for documenting the department- or functional-level models

3. Project Documentation	• Ensuring all project-related documents are communicated effectively & consistently
a. Project charter/definition	• Definition of project definition documentation
b. Project plans, estimates & schedules	• Definition of plan formats, granularity, etc. to ensure efficient data & resource sharing
c. Requirements & design documents	• Definition of analysis & design documentation to support consistency & reusability
d. Approvals	• Definition of the authorization levels & processes
e. Testing, conversion & implementation plans	• Definition of testing processes, roles & responsibilities, & other implementation processes
4. Systems / Applications Documentation	• Ensuring all development-related documents are written effectively & consistently
a. Screen designs & report layouts	• Definition of processes & tools for prototyping
b. Application code	• Definition of formats for code documentation
c. User guides & training materials	• Definition of formats for user documentation
d. Document control	• Ensuring that all development documentation is effectively managed & controlled
- Storage & access	• Definition & maintenance of storage & access mechanisms
- Source control	• Definition & maintenance of effective source control procedures