

Program Management Toolkit Concept and Contents

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Organization: W063
Project: 01CCG100

MITRE

Purpose of PM Toolkit

The purpose of the this Toolkit is to provide convenient access to material, processes, practices and expertise to facilitate program management activities and improve productivity through product reuse.

Program Management Toolkit (PMT)

Program Toolkits and Processes

- **Program Assessments Toolkit**
- **Risk Analysis and Management Toolkit**
 - RAMP (Lessons Learned) Database
- **C4ISP (Interoperability Support Plans) Toolkit**
- **Requirements Management Toolkit**
- **Earned Value Metrics (EVM) for PMs**
- **Cost as an Independent Variable (CAIV)**
- **Decision Analysis**
- **Analysis of Alternatives**

Resources

- **Gov't Mandates & Initiatives**
 - DOD 5000.2
 - C4ISP
 - OSS&E
 - CMMI
 - Clinger-Cohen Act
- **Best Practices Forum**

Expertise

- **Technical Hot Line**
- **Technical Groups**
- **Technology Area Teams (TATs)**
- **Chief Engineers and Technical Integrators**

Highlights

- **About PMT**
- **What's New**
- **Recent Comments & Suggestions**

Program Assessment Toolkit

See Judy Clapp Site

<http://eternity.mitre.org/Toolkit/mainframes.htm>

Risk Analysis and Management Toolkit

Overview

Overview

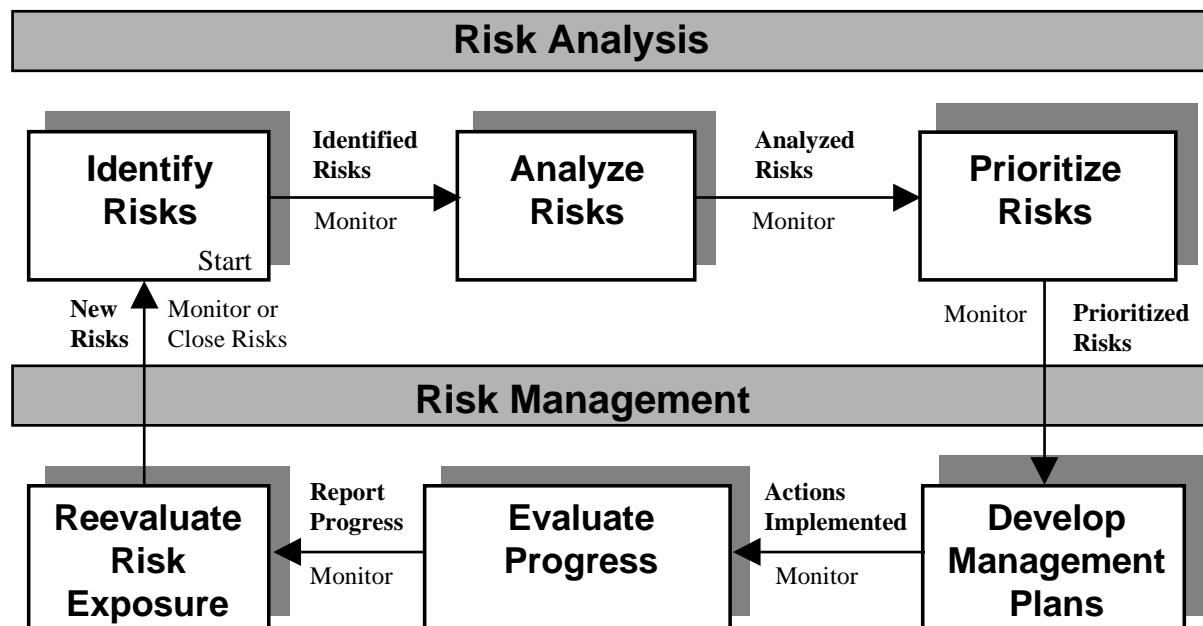
Risk Analysis

- Identify Risk
- Analyze Risk
- Prioritize Risk

Risk Management

- Develop Management Plans
- Evaluate Progress
- Reevaluate Risk Exposure

The purpose of this toolkit is to provide program managers with convenient access to material, processes, practices and expertise to facilitate risk management activities and improve overall productivity through product reuse. The toolkit contains risk management guidance, checklists, risk identification, analysis, and management tools, as well as tutorials, exemplar documentation, and points of contact.



Risk Analysis and Management Toolkit

Risk Analysis

[Contacts](#)

Overview

Risk Analysis

[Identify Risk](#)[Analyze Risk](#)[Prioritize Risk](#)

Risk Management

- **Purpose**

The procedures presented in this section will facilitate the positive identification, analysis, and prioritization of risks. They will foster the early identification and documentation of risks such that mitigation strategies can be developed and implemented in a timely manner; strengthen the resource allocation decision process; manage the expectations of users, oversight organizations, and other stakeholders; illuminate areas where detailed technical performance studies or program cost and schedule analyses should be focused; and facilitate integration, by providing early identification of risks that cut across projects or impact system interfaces.

- **Tasks**

Identify risks to the program.

Analyze the impact of the risks identified.

Prioritize the risks for management action.

- **Outcome**

A rank ordered list of risks with the probability of occurrence, expected timeframe, and impact to the program identified.

Risk Analysis and Management Toolkit

Risk Analysis: Identify Risk

Overview

Risk Analysis

Identify Risk

Tools / Tutorials

Analyze Risk

Prioritize Risk

Risk Management

- **Purpose**

Risk identification is the critical first step of the risk management process. Risk identification defines the set of events that could have an unwanted impact on a project's cost, schedule, or technical performance requirements. The objectives of risk identification are to enumerate known project risks and identify risks not immediately evident to the project team. Risk identification occurs continuously throughout the project's life cycle.

- **Tasks**

All program/project stakeholders have the responsibility to assist in the identification, validation, and eventual mitigation of risk. Stakeholders include end-users, management, and representatives from the program's oversight authorities. Risks can be identified and validated through systematic engineering analyses, as well as by the application of observation, judgment, and experience. Risk identification efforts should include reviews of written materials, as well as interviews with subject experts in specific areas of the program. A working session should be held, with key team members and experienced personnel, to review and validate all identified risks.

- **Outcome**

A list of program risks

Risk Analysis and Management Toolkit

Risk Analysis: Identify Risk: [Risk Identification Tools/ Tutorials](#)

Overview

There are many techniques to evaluate risk. Provided below are some approaches and tools practiced by MITRE projects and / or customers.

Risk Analysis

Identify Risk

Tools / Tutorials

Analyze Risk

Prioritize Risk

Risk Management

- [Guide to identify and validate risks](#) lays the framework for risk identification
- Utilize the [list of risks in RAMP](#) to identify risk areas and specific risks.
- [RiskCheck](#) will enable you to profile your program/project and will identify the risks programs experienced with similar project features
- [Risk Cues](#) provides more than 75 risk factors common to information technology projects and cues to help identify when the risk might impact the program. It was developed for the Information Management and Telecommunications Project Office for the Pentagon Renovation Project.
- Risk considerations when using commercial off the shelf (COTS) items
 - [Common Risks and Risk Mitigation Actions for a COTS-based System](#) article highlighting risks associated with COTS
 - [COTS Product Assessment Guidance](#) to aide in evaluation of COTS risks such as vendor viability
 - [Managing COTS software](#) to aide in the evaluation of the program life cycle considerations when using COTS software
- [Writing a risk statement](#) clearly will aide in the communication and evaluation of the risk
- Risk Identification PowerPoint [Tutorial](#)

Risk Analysis and Management Toolkit

Risk Analysis: Identify Risk: Risk Identification Tools: [Identify Risks Guide](#)

Overview

Risk Analysis

Identify Risk

Tools, Tutorials

Analyze Risk

Prioritize Risk

Risk Management

The following is a guide to stakeholders in identifying and validating project risks.

Understand the project's technical performance requirements. Understand the operational (functional and environmental) conditions under which the project's key performance areas (KPAs) or key performance parameters (KPPs) are measured. Pay close attention to requirements that are not clearly stated or stable.

- Determine and list technical and performance risks related to the engineering processes being applied. Identify those processes (internal or contractor-driven) that are planned or needed to design, develop, and implement the project. Compare these processes with industry best practice. Identify deviations from these practices that are associated with new or untested processes.
- Determine and list the schedule risk associated with the project. Evaluate the reasonableness of the schedule estimate and the risk that the planned (or baselined) schedule is feasible for the work required to be performed.
- Determine and list the cost risk associated with project. Evaluate the reasonableness of the cost estimate and the risk that the planned (or budgeted) cost is feasible for the work required to be performed. Insufficient resources – personnel, funds, schedule, and tools necessary for successful development and deployment of the project are a common and serious risk.
- Review the set of risk checklists provided in the risk identification aides. These lists have been developed from government and industry experience. They provide an independent source for comparing a set of identified risks against those known to have occurred on projects in the past.

Risk Analysis and Management Toolkit

Risk Analysis: [Analyze Risk](#)

Overview

Risk Analysis

- Identify Risk
- Analyze Risk
- Tools / Tutorials
- Prioritize Risk

Risk Management

• Purpose

The analyze risk element of the risk management process is focused on assessing the probability that each identified risk will occur, the severity of its impact to the project (if the risk does occur), and the time frame when the risk's impact will be felt on the project.

• Tasks

- review risk management techniques and options
- select the risk management approach most suitable to the program
- assess the probability the risk will occur
- assess the cost, schedule, and technical impact of each risk
- assess the timeframe in which the risk will occur
- identify warning flags that the risk may occur or the impact may change
- identify other projects within the program this risk may impact

• Outcome

list of risks with the severity of impact to the program determined

Risk Analysis and Management Toolkit

Risk Analysis: Analyze Risk (continued)

Overview

Risk Analysis

Identify Risk
Analyze Risk
Tools / Tutorials
Prioritize Risk

Risk Management

Impact

Each risk identified for the project is characterized in terms of its potential effects on the cost, schedule, and technical performance of the project. Tables 2, 3, and 4 present guidelines in assessing these impacts.

Rating	Definition	Equivalent Numerical Value
<i>Severe</i>	An event whose occurrence will impact the project's cost (and/or schedule) so severely that the project will be terminated.	1
<i>High</i>	An event that, if it occurs, will cause significant cost (and/or schedule) increases (e.g., increases of more than 5 percent) on the project.	Defaults: 0.65, 0.83, 0.95 Range: $0.65 \leq \text{Allowable Value} < 1$
<i>Moderate</i>	An event that, if it occurs, will cause noticeable cost (and/or schedule) increases (e.g., increases of not more than 5 percent) on the project.	Defaults: 0.35, 0.50, 0.60 Range: $0.35 \leq \text{Allowable Value} < 0.65$
<i>Low</i>	An event that, if it occurs, will cause small cost (and/or schedule) increases that, in most cases, can be absorbed by the project.	Defaults: 0.05, 0.18, 0.30 Range: $0 < \text{Allowable Value} < 0.35$
<i>None</i>	An event that, if it occurs, will cause no impact to cost (and/or schedule) of the project.	0

Table 3. Cost / Schedule Impact Ratings and Definitions

Risk Analysis and Management Toolkit

Risk Analysis: Analyze Risk: [Risk Analysis Tools / Tutorials](#)

Overview

Risk Analysis



Risk Management

There are many techniques to evaluate risk. Provided below are some approaches and tools practiced by MITRE projects and / or customers.

- [Risk Matrix](#) - identify risks and high, medium, low impact to the program. A Microsoft Excel based implementation to rate risks. This approach is utilized by the Air Force, Electronic Systems Center.
- [Risk Tool](#) - an Access database and web enabled visualization tool to aide and track risk evaluation. The entire process is captured in the document "[Implementing a Risk Management Process for a Large Scale Information System Upgrade – A Case Study](#)." This process was initially established for our CSTAM customer, and tailored / evolved into this implementation for a USGC customer.
- A short MITRE EDAC [briefing](#) highlighting some DoD risk management and analysis approaches and tools, 8 Aug 00
- A briefing presenting a risk evaluation approach [Linking Impact & Criticality](#) for consideration by a CSTAM customer

Risk Analysis and Management Toolkit

Risk Analysis: Prioritize Risk

Overview

Risk Analysis

Identify Risk

Analyze Risk

Prioritize Risk

Risk Management

- **Purpose**

This element of the risk management process is focused on determining the relative rank-order of the identified risks. A "most-to-least critical" risk ranking is computed as a function of each risk's potential impacts to the project. This ranking provides an input to management on where resources may be needed to manage, or mitigate, potentially high impact risks. Like risk identification, this is an activity that continues throughout the project's life cycle.

- **Tasks**

- order the risks from highest to lowest priority; utilize a risk analysis and management tool such as Risk Matrix, Risk Nav, Risk Tool, to compute the analysis scores and sort the risk list by priority

- **Outcome**

Clear vision of top priority risks for management attention / resource allocation

Risk Analysis and Management Toolkit

Risk Management

[Contacts](#)

Overview

Risk Analysis

Risk Management

[Develop Management Plans](#)[Evaluate Progress](#)[Reevaluate Risk Exposure](#)

- **Purpose**

Develop management / mitigation plans for priority risks, evaluate the progress of those plans, and evaluate changes to the risk impact to the program.

- **Tasks**

- Develop management plans for priority risks
- Evaluate the mitigation plan status
- Reevaluate the current risk status, impact to the program, and new risks

- **Outcome**

management plans for priority risks and updated risk impact evaluation

Risk Analysis and Management Toolkit

Risk Management: Develop Management Plans

Overview

Risk Analysis

Risk Management

Develop Management Plans

Tutorials / Samples

Evaluate Progress

Reevaluate Risk Exposure

• Purpose

After the project's risks have been analyzed, a risk management (or mitigation) plan is developed (for each risk) and implemented. Like the previous elements of the risk management process, risk management planning is a continuous process that includes the regular monitoring of risk handling actions in terms of status and completion dates. The risk management planning process must identify what actions are needed, when these actions must be completed, and who is responsible for their implementation and resolution.

• Tasks

- identify the person responsible for the management of the risk
- review risk mitigation techniques and options
- select the risk management approach most suitable for the risk
- identify action steps to manage the risk
 - identify person(s) responsible to carry out the action
 - identify the start and end dates for each action

• Outcome

management / mitigation plans for priority risks

Risk Analysis and Management Toolkit

Risk Management: Evaluate Progress

Overview

Risk Analysis

Risk Management

Develop Management Plans

Evaluate Progress

Reevaluate Risk Exposure

- **Purpose**

This element of the process is focused on assessing the progress of the risk-handling actions defined in a risk's management plan. The primary contact for managing the identified risk is responsible for evaluating, and reporting to management, the overall progress of the risk management plan.

- **Tasks**

- action owners report status of action steps to mitigate risks
- risk managers review mitigation status

- **Outcome**

understanding of risk mitigation progress (status of actions to manage the risk)

Risk Analysis and Management Toolkit

Risk Management: Evaluate Progress (continued)

Overview

Risk Analysis

Risk Management

Develop Management Plans

Evaluate Progress

Reevaluate Risk Exposure

Measures, or mechanisms, available to assess the effectiveness of risk mitigation actions include the following:

- Building Rapid Prototypes. Prototypes can often be rapidly developed to demonstrate that risks have been successfully abated. Prototypes are particularly effective in the early design stages of a project.
- Defining and Monitoring Technical Performance Measures (TPM). This is a technique that compares estimated values of key performance parameters with achieved values, and determines the impact of any differences on system effectiveness. This technique can be useful in risk monitoring by comparing planned and achieved values of parameters in areas of known risk. The periodic application of this technique can provide early and continuing predictions of the effectiveness of risk-handling actions or the detection of new risks before irrevocable impacts on cost, schedule, or performance occur.
- Defining and Monitoring Project Metrics. These provide the Acquisition Manager with timely information on the status of the project and risk-handling actions, and is essential to risk monitoring and project success. To be meaningful, these metrics should have objective values against which observed data can be measured and trends forecasted.

Risk Analysis and Management Toolkit

Risk Management: [Reevaluate Risk Exposure](#)

Overview

Risk Analysis

Risk Management

[Develop Management Plans](#)

[Evaluate Progress](#)

[Reevaluate Risk Exposure](#)

• Purpose

Reevaluate risk status, priority, and the effectiveness of the management / mitigation actions. This should be conducted prior to and after key project events to assess progress, make necessary adjustments, and plan for the next critical review or milestone. The intent of this activity is to look forward into the next set of key project events and identify specific issues or risks that may occur, and changes to previously identified risks.

• Tasks

- Assemble the project expertise needed for the reevaluation.
- Review the project's upcoming objectives and the products of the next reporting period or period of performance.
- Review the current risk impact and management status. Look for any deviations from plans. Note any of the risks or actions underway that are critical to the success of the next reporting period or project milestone.
- Review the effectiveness of all risk mitigation actions; reprioritize risks, as appropriate, from previous assessments.

• Outcome

set of new risks identified and current assessment of previously identified risks



Risk Checklist

[Back to Risk Identification Tools](#)

Commercial-off-the-Shelf (COTS)

- Adherence to GOTS
- Adherence to Standards (Nat'l and Int'l)
- COE Maturity
- Computer Obsolescence/Migration
- COTS Availability
- COTS Evaluation
- COTS Integration
- Government Furnished Equipment (GFE)
- Integration with Existing non-COTS
- Modifications

Environmental Aspects

- Base Cleanup
- Operations/Support Compliance
- Production Compliance
- Site Environmental Impact
- System Design Considerations
- System Disposal

External Interfaces

- Interface Specifications
- Interfaces to Other Systems

Funding and Schedule (Program-level)

- Cost and Schedule
- Funding (Stability/Profile)

Hardware

- A/D Converter
- Airborne Radomes
- Analog Design
- Beyond State-of-the-Art
- BIT/BITE Implementation
- Built-in-test
- Design Automation for Integrated Circuits (ICs)
- Diminishing Manufacturing Source
- Display System
- Frequency Synthesizer
- High-power RF
- Interference Protection Features (IPF)
- Memory
- Microelectronics Analog (MMIC, other)
- Microelectronics Digital (VLSI/VHSIC/ASIC, other)
- Nonstandard Parts
- Packaging (Size/Weight/Power)
- Packaging of ICs
- Phased Array Antenna
- Power System (UPS, other)
- Processor Timing and Sizing
- Radiation Hardened Parts

Imagery

- Imaging Compression/Decompression
- Imaging Standards
- Virtual Reality

Logistics Planning

- COTS Upgrades/Supportability
- Logistics Model Validity
- Logistics Support Analysis
- Personnel
- Repair Level Analysis
- Spares
- Support & Test Equipment
- Technical Manuals
- Training, Material, Equipment

Manufacturing

- Engineering Change Orders (ECO)
- Manufacturing Facilities
- Modernization

Networking

- Communications Protocols
- Interface Standards/Protocols
- Multiple Access
- Network Planning
- Network Security

Operational Site Activation

- A-kit Acquisition (Equipment Integration)
- Installation and Checkout
- Site Activation

Other/Misc.

- Culture

Process to meet a valid need by the military

Milestones ->   



Common Documents & Terminology

Concept Exploration	Component Advanced Development	System Integration	System Demo	LRIP	IOC	Rate Production & Deployment
Mission Needs Statement - MNS	Operational Requirements Document - ORD	Analysis of Alternatives - AOA	Acquisition Program Baseline - APB	CAIV	Etc.	Etc.

Acquisition Start-Up Process

(for the purpose to illustrate planned PM tool-kit)

Prior to an acquisition several start-up activities must occur. These typically are: Requirements generation, development of Mission Needs Statement or MNS, organization of a project team, ...brief the acquisition authority at Milestone A which then provides the "Green" light to proceed into the next phase of the process, Concept and Technology Development.

.....

bed in CJCSI 3170.01A, is validated prior to Milestone A. ...Cost as an Independent Variable or CAIV, also plays a role in the planning process, and

Etc., Etc., Etc., ... It documents performance deficiencies in current capabilities and opportunities to provide new capabilities. It also identifies and describes the mission contained in the DoD Strategic Plan and the deficiency, discusses the results of the mission area analysis, why non-materiel changes are not sufficient to correct the deficiency, etc... The MNS defines the requirements in broad statements of operational capability which are further refined at successive milestone decision points as a consequence of CAIV-based-schedule-performance trade-offs during each phase of the acquisition process.

5000.2-R 2.3

The operational requirements document (ORD) is comprised of, in pertinent part, key performance parameters (KPP's), thresholds and objectives. These thresholds and objectives shall be documented in the ORD by the user (or rep) at program initiation (usually milestone B). The method in which these terms are assigned values is CAIV-based, and considers the results of the analysis of alternatives and the impact of the affordability constraints. The area bSources

DoDD 5000.1

DoDD 5000.2

DoDI 5000.2-R

CJCSI 3170.01A

DoD 5000 Acquisition Model



[Return to Main Page](#)

Milestone Process

(for the purpose to illustrate planned PM tool-kit)

MILESTONE A: Prior to an acquisition several start-up activities must occur. These typically are: Requirements generation, development of Mission Needs Statement or MNS, organization of a project team, ...brief the acquisition authority at Milestone A which then provides the "Green" light to proceed into the next phase of the process, Concept and Technology Development.

Etc., Etc., Etc., ... It documents performance deficiencies in current capabilities and opportunities to provide new capabilities. It also identifies and describes the mission contained in the DoD Strategic Plan and the deficiency, discusses the results of the mission area analysis, why non-materiel changes are not sufficient to correct the deficiency, etc... **The MNS defines the requirements in broad statements of operational capability which are further refined at successive milestone decision points as a consequence of CAIV-based-schedule-performance trade-offs during each phase of the acquisition process.** Etc., Etc., Etc., ... Etc., Etc., Etc., ... Etc., Etc., Etc., ...

[5000.2-R](#) 2.3

DoD 5000 Acquisition Model



"CAIV Thread" Throughout the Acquisition Process

(for the purpose to illustrate planned PM tool-kit)

Cost as an independent variable(CAIV) is not a concept that is applied only to a discreet area of the acquisition process, but is concept that is ubiquitous to the entire acquisition process. It defines cost-performance trade-offs and tempers these trade-offs in order to arrive at an affordable balance between performance, cost, and schedule.

[Detailed CAIV info here.](#)

Following examines the "threads" of CAIV throughout the Acquisiton Process.

Mission Needs Statement

The proper adherence to the CAIV-based process starts with the proper generation of the MNS.

The generation of the mission needs statement (MNS), described in CJCSI 3170.01A, is validated prior to Milestone A. It documents performance deficiencies in current capabilities and opportunities to provide new capabilities. It also identifies and describes the mission contained in the DoD Strategic Plan and the deficiency, discusses the results of the mission area analysis, why non-materiel changes are not sufficient to correct the deficiency, etc... **The MNS defines the requirements in broad statements of operational capability which are further refined at successive milestone decision points as a consequence of CAIV-based-schedule-performance trade-offs during each phase of the acquisition process.**

Operational Requirements Document

The operational requirements document (ORD) is comprised of, in pertinent part, key performance parameters (KPP's), thresholds and objectives. These thresholds and objectives shall be documented in the ORD by the user (or rep) at program initiation (usually milestone B). **The method in which these terms are assigned values is CAIV-based, and considers the results of the analysis of alternatives and the impact of the affordability constraints.** The area between the threshold (minimum acceptable value) and the objective is called the trade space and is the primary area where trade-offs occur. The KPP's are defined as that capability so significant that the failure to meet the threshold can be the cause for the concept or the system to be reevaluated or the program terminated. 5000.2-R,3.2.1

Analysis of Alternatives

An analysis of alternatives (AoA) is part of the CAIV process and shall be prepared and considered at the appropriate milestone reviews beginning with program initiation (usually milestone B). The process reveals risk, uncertainty and the relative advantages/disadvantages of the alternatives being considered. 5000.2-R,2.4

Affordability

Affordability is the degree to which the life-cycle cost of an acquisition program is in consonance with the long-range investment and force structure plans of the Department of Defense or individual DoD Components. It shall be assessed at each milestone decision point beginning with program initiation (usually milestone B). 5000.2-R, 2.4

Acquisition Program Baseline

Every acquisition program shall establish an Acquisition Program Baseline (APB) to document the cost, schedule, and performance objectives and thresholds of that program beginning at program initiation (usually milestone B). The format is in the Consolidated Acquisition Reporting System (CARS). The APB shall contain only the most important cost, schedule, and performance parameters. The minimum number of parameters shall include the KPP's described in the ORD and validated by the JROC for inclusion in the APB. The values of the objectives/thresholds in the APB shall not differ from the value for a like objective or threshold in the ORD. 5000.2-R, 3.2.2.2

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C4ISP

The screenshot shows the DSC homepage with a blue header containing the DSC logo and navigation links for Members, WebMail, Connections, BizJournal, SmartUpdate, and Marketplace. The main content area features a banner for 'Joint C4ISR' and 'Decision Support Center'. It includes a sidebar with links for Time Critical Targeting, Organization, C4ISR Spt Plans, C4ISR Databases, MSRR Nodes, and DSC Studies. A central text block provides information about the DSC's establishment, its mission, and various publications like Final Draft DODD 4630.5 and AF/CIO Policy.

The screenshot shows the 'C4I Support Plan (C4ISP) TEM' registration page. The top menu includes File, Edit, View, Go, Communicator, and Help. The toolbar includes Bookmarks, NetSite, Members, WebMail, Connections, BizJournal, SmartUpdate, and Marketplace. Below the toolbar are Back, Forward, Reload, Home, Search, Guide, Print, Security, and Stop buttons. The main content area has a purple header with the title 'C4I Support Plan (C4ISP) TEM' and the date '12-15 December 2000 MITRE/Bedford'. It features tabs for REGISTER, AGENDA, ATTENDEES, MEDIA, WELCOME, ORGANIZERS, and REMOTE ACCESS. The REMOTE ACCESS section contains tables for OSD/AGENCY, AF, ARMY, NAVY, MARINES, and INTEL/Other, each listing various documents such as Final Draft DODD 4630.5, AF/CIO Policy, AF Guide.pdf, AF/CIO Brief (C4ISP 20 Aug), LSI Letter, and LSI Briefing for OSD by AFMC.

Risk List

The screenshot shows a web-based application titled "RISK LIST" under the heading "Project: <All Projects>". At the top left is a circular seal featuring a figure in front of an American flag, with the words "INTELLIGENCE CENTER" and "We Welcome". Below the title are navigation links: "Home" (underlined), "Risk List" (underlined), and "Plot List".

Below the navigation is a search bar with dropdown menus for "Sort by" (set to "Risk Id") and "Filter by" (set to "All"). The "Filter by" section includes a "Status" field with color-coded checkboxes for various risk levels: Green (checked), Red, Yellow, Orange, Blue, Purple, and Black.

A message below the filters reads: "the Risk Analysis Worksheet for a risk or **mitigation** to see the Risk Mitigation Worksheet."

The main content area displays a table with columns: "Risk Name", "Risk Priority", "Mitigation Status", "Probable Impact Date", and "Risk Manager". A row in the table shows:

	Risk Name	Risk Priority	Mitigation Status	Probable Impact Date	Risk Manager
PCO.1 analysis mitigation	Risk Name: Personnel	High/ 0.836	█ Green	11/30/2000	Fir, Douglas
	Risk Statement: Not enough cleared personnel, transition of key personnel, shortage of personnel with requisite technology skills. Commo 21 program development, schedule and implementation may be hindered.				
	Mitigation Strategy: Designate key personnel on all critical tasks to ensure long term availability and/or quick turn around for replacement personnel.				

Risk Analysis Worksheet

Risk Analysis Worksheet		Add a POC	Date Updated 12/15/2000		
Project ID	Program Control Office	Risk ID	PCO.1		
Risk Identified by	Douglas Fir	Date risk identified	11/29/2000		
Brief Risk Name		Risk Probability Extremely sure to occur 0.975			
Personnel		Impact Areas:			
		Cost Moderate 0.500			
		Schedule High 0.830			
		Technical Performance Moderate 0.500			
		Compliance and Oversight Moderate 0.500			
Risk Warning Flags		Risk Impact Rating Moderate 0.582			
Inability to staff tasks		Risk Time Frame Short-term 0.95			
Probable Impact Date 11/30/2000		→ Risk Time Frame			
Risk Correlation with Other C21 Projects					
<input checked="" type="checkbox"/> project1 <input checked="" type="checkbox"/> project2					
 RISK ANALYSIS WORKSHEET Project: Program Control Office					
Home Risk List Plot List Select Mitigation to view the Risk Mitigation Worksheet.					
Risk ID: PCO.1 prev next					
Identification		Analysis		Ranking	
Risk ID Date: 11/29/2000 Risk Name: Personnel Risk Statement: Not enough cleared personnel, transition of key personnel, shortage of personnel with requisite technology skills. Commo 21 program development, schedule and implementation may be hindered.		Probable Impact Date: 11/30/2000 Risk Timeframe: Short/ 0.95 Risk Probability: High/ 0.975 Impact Ratings: Cost: Moderate/ 0.5 Schedule: High/ 0.83 Technical: Moderate/ 0.5 Compliance & Oversight: Moderate/ 0.5 Risk Warning Flags: Inability to staff tasks		Risk Priority Ranking: 12th Risk Priority: High Risk Score: 0.836 Risk Impact: Moderate Impact Score: 0.582 Consequence Score: 0.766	
Points of Contact					
Risk Identified By	Name Douglas Fir	Phone 555-555-5511	Secure Phone 555-222-5522		
Risk Managed By	Douglas Fir	555-555-5511	555-222-5522		

Risk Mitigation Worksheet Input

Risk Mitigation Worksheet				Date	Mitigation	Last Updated	
Project	Program Control Office	Risk ID	PCO.1	Risk Priority Rating	High	Probable Impact Date	11/30/2000
Brief Risk Name Personnel				Warning Flags inability to staff tasks			
Risk Statement Not enough cleared personnel, transition of key personnel, shortage of personnel with requisite technology skills. Commo 21 program development, schedule and implementation may be hindered.				Risk Correlation <input checked="" type="checkbox"/> project1 <input checked="" type="checkbox"/> project3 <input checked="" type="checkbox"/> project5 <input checked="" type="checkbox"/> project7 <input checked="" type="checkbox"/> project2 <input type="checkbox"/> project4 <input checked="" type="checkbox"/> project6 <input checked="" type="checkbox"/> project8			
Risk and Impact Description	This risk could significantly hinder the program, the schedule is extremely tight, loss of staff or inability to staff to 100 percent will affect the schedule.				Risk Manager	Add a POC	
Mitigation Strategy	Designate key personnel on all critical tasks to ensure long term availability and/or quick turn around for replacement personnel.				Douglas Fir		
Action	Risk Mitigation Action			Scheduled Start Date	Actual Start Date	Date Completed	
1	ID Each project determine critical tasks			10/30/2000	10/01/2004	10/30/2000	
Action Status				Action Owner	Meredith LaLa		
on-going				Status	Green	Add a POC	
Action	Risk Mitigation Action			Scheduled Start Date	Actual Start Date	Date Completed	
2	ID Each project designate key personnel for critical tasks			10/30/2000	10/30/2004	11/10/2000	
Action Status				Action Owner	Charlene McMc		
Return to Risk Analysis				Exit Database			
Record: 1 of 1 (Filtered)							

Risk Mitigation Worksheet

[Home](#) | [Risk List](#) | [Plot List](#)

Select [Analysis](#) to view the **Risk Analysis Worksheet**.

Risk ID: PCO.1 [prev](#) | [next](#)

Risk Mitigation Worksheet													
Project Name: Program Control Office		Probable Impact Date: 11/30/2000		Last Updated: 11/30/2000									
Risk Name: Personnel		Risk Priority: High/0.836		Mitigation Status: Green									
Risk Statement: Not enough cleared personnel, transition of key personnel, shortage of personnel with requisite technology skills. Commo 21 program development, schedule and implementation may be hindered.													
Risk Warning Flags: inability to staff tasks				Correlation with Other Projects: Project One, Visualization Tool, Project Three, Project Five, Project Six, Database Development, Project Eight									
Risk and Impact Description: This risk could significantly hinder the program, the schedule is extremely tight, loss of staff or inability to staff to 100 percent will affect the schedule.													
Mitigation Strategy: Designate key personnel on all critical tasks to ensure long term availability and/or quick turn around for replacement personnel.													
Action ID	Description	Status		Owner	Scheduled Start Date	Scheduled Completion Date	Actual Start Date	Actual Completion Date					
PCO.1.1	Each project determine critical tasks	 Green	on-going	LaLa, Meredith	10/30/2000	10/1/2004	10/30/2000						
PCO.1.2	Each project designate key personnel for critical tasks	 Green	delay due to critical tasks evaluation, but on track	McMc, Charlene	10/30/2000	10/30/2004	11/10/2000						
Points of Contact													
Risk Identified By		Name		Phone		Secure Phone							
Douglas Fir		555-555-5511		555-222-5522									
Risk Managed By		Douglas Fir		555-555-5511		555-222-5522							

Risk List Sorting and Filter

The screenshot shows a web-based application interface for managing risks. At the top left is a circular seal with "INTELLIGENCE" around the top edge and "W e l c o m e" in the center. To its right is a stylized American flag background with the word "Welcome" overlaid. The main title "RISK LIST" is centered above the subtitle "Project: <All Projects>". Below the title are navigation links: "Home" (underlined), "Risk List" (underlined), and "Plot List".

Below the navigation is a search bar with "Sort by" and "Filter by" sections. The "Sort by" dropdown is set to "Risk Id". The "Filter by" section includes a dropdown for "Risk Manager" set to "All", a "Status" dropdown with several checkboxes checked (green, red, yellow, blue, black), and a "Apply" button.

A note below the filter section reads: "the Risk Analysis Worksheet for a risk or **mitigation** to see the Risk Mitigation Worksheet."

The main content area displays a table of risk items. The table has columns: Risk Name, Risk Priority, Mitigation Status, Probable Impact Date, and Risk Manager. A vertical sidebar on the left lists categories: "PCO.1", "analysis", "mitigation", and "mitigation". The first row of the table shows a risk item with "Risk Name: Personnel", "Risk Priority: High/ 0.836", "Mitigation Status: Green", "Probable Impact Date: 11/30/2000", and "Risk Manager: Fir, Douglas". Below this row, under the "mitigation" category, there is a detailed description of the risk statement and mitigation strategy.

	Risk Name	Risk Priority	Mitigation Status	Probable Impact Date	Risk Manager
PCO.1 analysis mitigation	Risk Name: Personnel	High/ 0.836	Green	11/30/2000	Fir, Douglas
	Risk Statement: Not enough cleared personnel, transition of key personnel, shortage of personnel with requisite technology skills. Commo 21 program development, schedule and implementation may be hindered.				
	Mitigation Strategy: Designate key personnel on all critical tasks to ensure long term availability and/or quick turn around for replacement personnel.				

Priority vs Probability Example

