

Quality Assurance Guidelines
For Projects at the
UNT Health Science Center

Section 4.4
Process for Analyzing and Managing
Low Focus Project Risk
(Recommended)

V 1.1
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1. PURPOSE OF THE PROCESS

This risk management process is used by project teams to identify and handle the risks on their project. It covers the needs of the project team to proactively manage their project. The process may be used to provide information to the risk management work of the overall organization.

2. SCOPE OF THE PROCESS

2.1 SCOPE

This process has been tailored for Low Focus projects, which represent a very high percentage of projects at the UNT Health Science Center. The table below identifies the characteristics of Low Focus projects:

Characteristic	Low Focus
Budget (with implied effort)	Less than \$500,000
Organizations Involved	work group within agency
Time to Deliver	less than 6 months to operation
Impact on Agency	Minimal change, or extends systems now in use
Impact Outside Agency	Affects mostly internal operations of the agency
Technology	Standard, proven agency technology
Supplier Involvement	Good experience in the past working with this supplier
System Complexity	standalone system

In addition, templates and tables have also been tailored for the Low Focus type of project. In some case, templates and/or tables have been identified as optional.

2.2 ACTIVITIES

The following table describes how risk management activities will be implemented for Low Focus projects.

Activity	Low Focus
Identify Risks	Use a list of categories of risks, or use a list of the key risks often encountered in the organization, to decide whether or not risks need to be handled

Activity	Low Focus
Analyze Risks	Review identified risks with a small team and determine how threatening they are to the project
Plan Risk Handling Actions	Include plans for the top 1 or 2 risks in the project work
Track and Control Risks	Monitor risk mitigation activities like other project actions

2.3 ROLES

The following table describes the roles for the Low Focus project.

Role	Low Focus
Risk Identification Team	Only the project manager and team members
Risk Mitigation Team	Only the project manager and team members

2.4 DELIVERABLES TAILORING

The following table describes the deliverables for Low Focus projects.

Activity Deliverable	Low Focus
Top N Risk Chart *	Usually fewer than five top risks
Mitigation Action Plan	One sentence action statements
Contingency Plan	Usually not needed
Risk Status Report*	Informal, as part of status updates

*See Appendix C for supporting templates

3. ROLES IN THE PROCESS

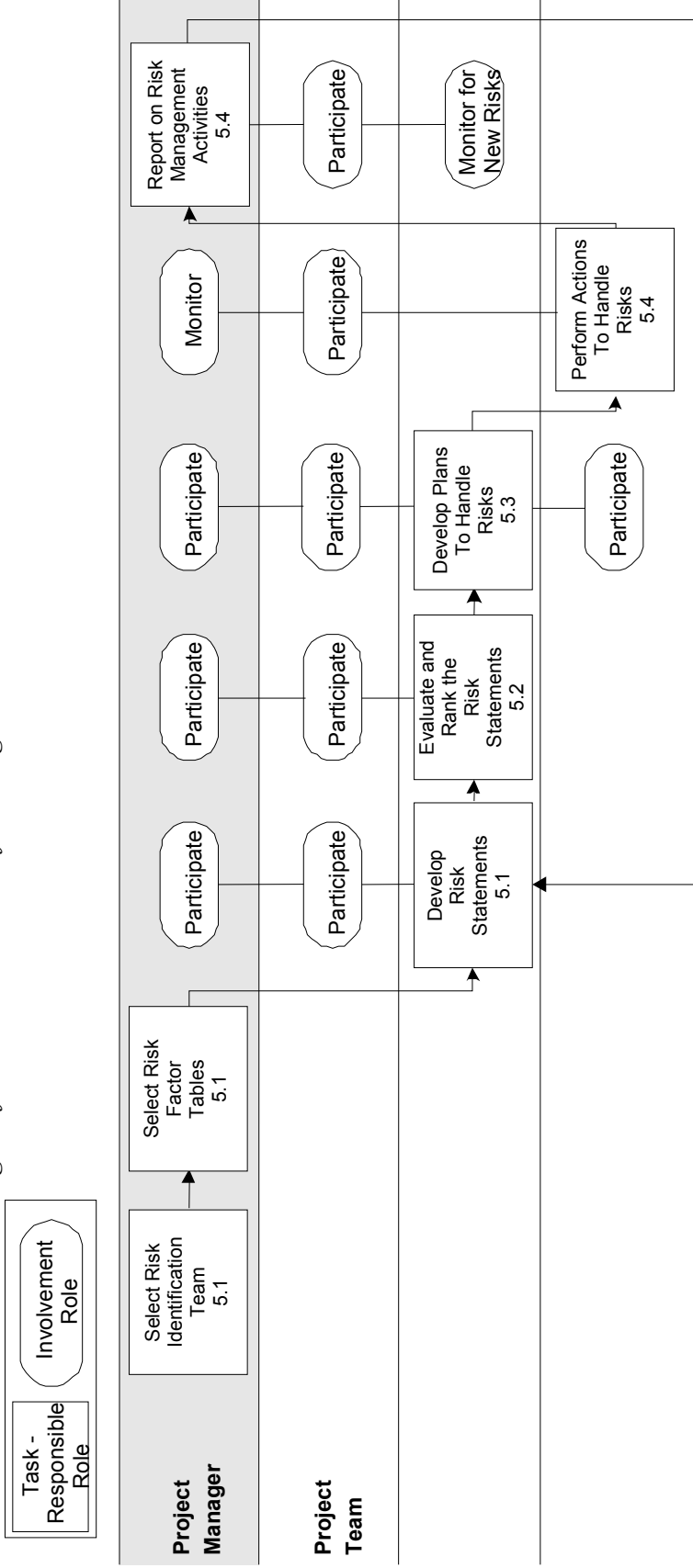
The roles have been tailored for the Low QA Focus project.

Role Names	Role Definitions
Project Manager	<ul style="list-style-type: none"> drives the risk management process at the start of a project participates in risk identification, mitigation, and tracking progress throughout the project accepts or rejects the level of risk for the project
Project Team	<ul style="list-style-type: none"> performs the risk management process for this project

4. GRAPHICAL OVERVIEW OF THE PROCESS

It should be noted that many of the activities are cyclical, or episodic, rather than tied to life cycle phases.

Note: The numbers in each rectangle refer to activities in the following section.



5. ACTIVITY DESCRIPTIONS

The following sections provide details on each activity – a description of the purpose, entry and exit criteria, deliverables, and the sequence of tasks to be done. Tasks are shown along with the roles generally responsible and/or involved in those tasks. Refer to the “Process for Project Planning” to see how the activities here tie in with those.

When considering the risk management work of the project, there are three areas to consider:

1. *Risk management* – identifying, analyzing, planning, and monitoring – should be a small part of the project infrastructure.
2. *Risk mitigation* – the work required to handle the risks. It may be small or it may be significant. In either case, it’s a part of the work breakdown structure of the project, and it gets scheduled like any other work item.
3. *Contingency management* – work defined in contingency plans. This is generally not included in the project work breakdown structure, but is additional work to be budgeted and done if the contingency condition indicates it is time for the contingency plan. The risk management plan should make such contingency estimates clear, and the plan should identify the method for getting approval for the funds/effort/other resources to conduct the contingency plan, if the need should arise.

5.1 IDENTIFY PROJECT RISKS

As the organization considers a prospective project, it evaluates potential risks to the opportunity, to be able to build a project plan that maximizes the probability of project success. Risk identification is generally done as part of a feasibility study, at the beginning of the active project work, and at each new phase of a large project. The process of identification is assisted by use of risk factor tables that capture indicators of commonly encountered risks.

Purpose: Name and describe the specific risks faced in this project, to be able to analyze those risks and decide on an approach to handle them.

Entry Criteria: • Project has been approved for work and team has been named

Roles	Tasks
Project Manager	Select risk identification team. Potential participants include <ul style="list-style-type: none"> • project team • representatives from other elements of the program, if the project is part of a larger program • partner or supplier representative • customer and user representatives Identify sets of risk factors that may apply. See Section A for template descriptions. Examples include

Roles	Tasks
	<ul style="list-style-type: none"> • general risk factor chart (or one tailored to an organization) • specific risk factor chart for this type of project • lessons learned on previous projects in this organization
Project Team	Identify which risk factors are relevant to the project, and rate their potential for indicating risk to the project (high, medium, low)
Project Team	For each high factor, identify the specific risk(s) to the project, citing the condition that could arise and the consequence to the project if it does arise.
Project Team	Organize the specific risks into sets that support analysis of impact and developing countermeasures. (These vary by project.)
Project Manager	Determine which risks to analyze further.

Exit Criteria: • List of risk items is ready to be analyzed

5.2 ANALYZE RISKS

The identified risks are analyzed to establish the project exposure for each risk and to determine which risk items are the most important ones to address. Risk exposure is defined as the product of the likelihood that the risk will occur and the magnitude of the consequences of its occurrence. In rare cases, the overall project risk exposure will be so high that the opportunities represented by the project really cannot be attained at a reasonable expense. In most cases, though, attacking the most significant of the risk items will maximize the project opportunity.

While the initial risk analysis deals with those risks identified early in the project, more analysis may be needed as the project proceeds. In cases where a new risk is identified, that new risk is analyzed and its exposure compared to that risks already being handled. That new risk may or may not be addressed with a mitigation action, depending on the cost of that action and the ranking of this new risk against others already being handled.

Purpose: Determine the projected risk exposure for each identified risk item

Entry Criteria: Identification process is complete and there is a team that can review the risks to estimate their impact.

Roles	Tasks
Project Team	Review each risk item and estimate <ul style="list-style-type: none"> • probability of occurrence of this risk item Calculate the risk exposure for each risk item. Rank the identified risks in order of exposure. Review ranked results and ensure team agreement with the ordering.
Project Manager	Consider level of risk represented by the project overall and decide whether or not to proceed with project as now planned.

Roles	Tasks
	Assuming the project is to proceed, identify those 1 or 2 key risks that merit mitigation efforts.

- Exit Criteria:**
- The project manager and others affected parties agree upon an acceptable level of risk for this project.
 - If the project proceeds, a list of key risks is identified by the Project Manager as those to be handled.

5.3 PLAN RISK HANDLING ACTIONS

Risks may be handled a number of different ways. Alternatives include:

- Accept the risk, with no investment of effort or cost. This is appropriate when the cost of mitigating exceeds the exposure, and the exposure is acceptable.
- Transfer the risk to someone else, or agree to share the risk. If a customer or partner is better able to handle the risk, this is probably the most effective approach.
- Fund and staff the efforts to reduce the probability that the risk will become a problem. Such mitigation tasks might include providing additional staff to help develop the product, getting special training for members of the team, or following a dual development path for the whole project.
- Fund and staff the efforts to reduce the loss associated with the risk should it become a problem. Examples might include keeping a backup LAN operational during the deployment of a new network.

Purpose: Establish an affordable set of actions to minimize the exposure from the key risks identified and ensure project success.

Entry Criteria: List of 1 to 2 key risks has been prioritized.

Roles	Tasks
Project Team and Project Manager	For each key risk, identify an approach to handle the risk, and estimate the effort or cost required for that action. Incorporate the risk handling actions into the project plan.

Exit Criteria: 1 to 2 key risks have been addressed with action plans.

5.4 TRACK AND CONTROL RISKS

Throughout the project, the project team tracks progress handling the risks, to ensure that:

- actions which should reduce the probability of occurrence are effective
- actions which should reduce the loss associated with the risk are effective

In addition, the team watches for additional risks that need to be addressed, as well as changes in impact or probability to previously identified risks.

Purpose: Ensure that mitigation actions are keeping the risks under control.

Entry Criteria: Risk handling actions are staffed and funded.

Roles	Tasks
Project Manager	Regularly review and update the status for each key risk, to ensure risks are under control. For any risk out of control, revise the mitigation action Update and publish the current Top Risk list. Prepare a risk status report for use in status updates.

Exit Criteria: Risk exposures for the risks to the project are at or below the level agreed to as acceptable for this project.

6. MEASURES

Measures that can be used to track the risk management activities include the following:

- **Completion of Risk Mitigation Actions** - For each mitigation action identified, track attributes such as the following:
 - Completion date of the action – did action complete as planned?

7. VERIFICATION ACTIVITIES

While risk management is being done, the following verification activities are appropriate for management:

- When reviewing project progress, include risk management status among the items being reviewed. Ensure that the project manager and project team are performing their planned risk management activities and their planned risk mitigation activities.
- When risk management actions require the assistance of management, ensure that the management tasks have been accomplished according to the plan that was set.

8. DOCUMENT CONTROL

Revision	Date	Description
1.0	2/1/00	Incorporate Quality Assurance Guidelines
1.1	3/01/01	Tailor for Low Focus

A. SUPPORTING TEMPLATES

Please see the following items, accessible separately:

- **Risk factor tables** – collections of risk factor tables for different kinds of projects, organized in categories, with cues to help identify risks to a project. These tables are useful for the following kinds of projects

Risk Factor Table	Recommended Project Use
Generic Software Acquisition Management (SAM) Project Risk Factors	Outsourcing of some or all of the project's software development
Generic Project Risk Factors	Any kind of project, including non-software projects, e.g. infrastructure implementation
Generic Software Project Risk Factors	Software development and maintenance projects
Packaged Systems Risk Factors	Acquisition of third party software packages

It is expected that project managers will use, at a minimum, the Generic Project Risk Factors Table for their project.

- **Risk Item Description** – form used to describe a specific risk in detail. Project managers are to complete these forms.
- **Risk Status Report** – form used to report on management of risks at regular project reviews. This report is considered optional. Risk reports may use the Risk Item Descriptions above
- **Top N Risk Chart** – form to use to track and manage the top risks in a project. This chart is considered optional. Since only a few risk items will be key, project managers may use the Risk Item Descriptions above.

B. SUPPORTING CHECKLISTS

Project managers are to use the following checklists accessible separately:

- **Risk Initiation Checklist** – items to consider when checking that a project team has begun its project with appropriate risk management
- **Risk Progress Checklist** – items to consider on a regular basis (perhaps monthly) to ensure that a project stays focused on risk management, identifying new risks and tracking its efforts on handling risks
- **Risk Completion Checklist** – items to consider when a project finishes, or when a major phase finishes, to ensure the process works well, that lessons learned have been captured, and that the risk management effort was worth the investment it took.