

# **Red Storm General Availability Risk Management Plan**

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The Red Storm GA Milestone will be executed on a relatively short schedule. The complexity of the project requires cooperation and input from a relatively large number of stakeholders, few of whom are solely devoted to Red Storm. It is important to preserve agility and to minimize operational overheads while executing both risk/opportunity management and overall project management.

The Red Storm General Availability Milestone Management Plan provides the following guidance:

During execution of the milestone, management will adopt and use standard risk and opportunity management practices as outlined in "Risk/Opportunity Management Guide," EPI 100-21, Version 3.0, June 2, 2005 and supplemented by Sandia's "Risk Management Process Guidance," RMPG-001, June 2003.

At a minimum, the following practices will be adopted:

- Regular risk/opportunity reporting.
- Use of qualitative risk/opportunity measures. Qualitative risk measures are most appropriate in the context of the milestone. Measurement categories will be documented in a companion document.
- Designation of a single person responsible for risk documentation and reporting. This role is commonly designated the "Risk Officer".
- Where possible, risks/opportunities will be linked to specific tasks or areas defined in the Project Plan.

## ***Risk Analysis***

Preliminary risk analysis will be performed via discussions and brainstorming with project participants. Rather than developing a fixed questionnaire or checklist, we will develop a series of questions that can be used via discussion or email to elucidate risks and their impacts. On-going review of the Risk/Opportunity list will provide further opportunities to amend the list.

## ***Risk/Opportunity Evaluation & Tracking***

Qualitative, as opposed to quantitative risk assessment will be used. Each risk or opportunity will be assigned a category, probability, impact, magnitude, and a handling strategy using the definitions shown Appendix A.

A risk/opportunity tracking system will be established using the definitions from Appendix A, and using the models present in the Risk/Opportunity Management Guide. Up-to-date summaries of the top risks will be posted to the Web document repository on a weekly basis.

## ***Risk/Opportunity Review & Reporting***

All risks and opportunities assessed with magnitude ‘High’ will be reviewed with management during regular progress meetings. Prior to those meetings, the risk owner will be asked to make any desired modifications to the risk ranking or status. Any additions or removals of risks or opportunities will be presented at the weekly management meeting as well.

Other risks and opportunities will remain on a watch list to be reviewed bi-monthly by the project team.; risk owners will be given the chance to review their assignments and rankings, to add new risks or opportunities, or to remove risks or opportunities from those being tracked.

## ***Appendix A: Definitions of Risk/Opportunity Terms***

Each risk or opportunity will be assigned one of four strategies as defined in Figures 2-10 and 2-11 of the R/O Management Guide:

<b>Risk</b>	<b>Opportunity</b>
Avoid	Exploit
Transfer	Share
Mitigate	Enhance
Accept	Accept

The following tables define the terms and values used for assessing risk categories, probabilities, impacts, and overall magnitudes.

**Table 1 Risk/Opportunity Categories**

Category
Cost
Schedule
Technical
Security
System Performance
Reputation

**Table 2 Probability of Occurrence**

Low	10-30%
Medium	30-70%
High	70-95%

**Table 3 Impact of Occurrence**

<b>Level</b>	<b>Risk</b>	<b>Opportunity</b>
Marginal	Barely noticeable decrease	Barely noticeable effect
Low	Insignificant decrease	Insignificant effect
Medium	Important scopes affected	Important improvement for some stakeholders
High	Decreases not acceptable to customer	Major win for project
Show Stopper	Results unusable	Major win for Sandia or specific Center

**Table 4 Magnitude as a function of Impact and Probability**

<b>Probability</b>	<b>Impact</b>	<b>Magnitude</b>
Low	Marginal	Low
Low	Low	Low
Low	Medium	Low
Low	High	Medium
Low	ShowStopper	Medium
Medium	Marginal	Low
Medium	Low	Low
Medium	Medium	Medium
Medium	High	High
Medium	ShowStopper	High
High	Marginal	Low
High	Low	Medium
High	Medium	High
High	High	High
High	ShowStopper	High