Purpose
The purpose of this document is to provide guidance on the practice of Issue Management and to describe the practice overview, requirements, best practices, activities, and key terms related to this practice. An issue log template is provided at the end of this guide for use in the absence of something more sophisticated.

Practice Overview
Project issues must be identified, managed and resolved throughout the project in order for the project to be successful. Issue management plays an important role in maintaining project stability and efficiency throughout the project lifecycle. It addresses obstacles that can hinder project success and/or block the project team from achieving its goals. These obstacles can include such factors as differences of opinion, situations to be investigated, emerging or unanticipated responsibilities. The purpose of issue management is to identify and document these issues and to resolve them by reviewing and carefully considering all relevant information.

Unresolved issues can be a source of conflict that delays or prevents the project team from attaining project goals, milestones, and deliverables. It is the responsibility of the project manager to effectively manage and monitor issues on a regular basis, follow up with issue owners to ensure progress is being made towards resolution, and to report on the status of issues. In addition to overcoming obstacles to success, effective issue management also contributes to having constructive working relationships among the project stakeholders, including the project team.

ISSUES VS. RISKS
There is often confusion between Issue Management and Risk Management and how the activities of each interface and interact with each other. According to the Project Management Body of Knowledge (PMBOK):

- **A risk** is an uncertain event or condition that, if it occurs, has a positive or negative impact on a project’s objectives.
- **An issue** is a point or matter in question or in dispute, or a point or matter that is not settled and is under discussion or over which there are opposing views or disagreements. Often project issues are first identified as a risk and through the risk management planning process may already have a planned approach to managing the issue.

Project risk management includes the processes for conducting risk management planning, identification, analysis, responses, and monitoring and control of a project. The objectives of project risk management are to increase the probability and impact of positive events and decrease the probability and impact of events adverse to project objectives. Project issue management includes utilizing the outputs from the project risk management planning if the issue was identified as a risk during the risk planning processes.

As issues arise during the course of managing a project and a project team, an issue log is commonly used to document these issues. This log includes a description of the issue, the assignment of each issue to one or more individuals for resolution, a target date by which the issue needs to be resolved, and other related information. The log helps the project team monitor and control issues until closure is reached.

Requirements
In general, all projects, regardless of type or size, should have an issue tracking system or log where issues are regularly managed and monitored on a regular basis by the project manager. As issues are identified and resolved, the issue log provides historical documentation of concerns that have been addressed throughout the project life cycle. Examples of issues and issue resolutions include:
Example Issues | Example Resolutions
---|---
Customers and the project team disagree about whether requested changes to the project are within or outside the scope of the current project. | A separate follow-on contract was proposed to address the requested changes and the customer agreed to this solution.
The project lacks a specific skill set. | Staff was added to the project to fill the missing skill gaps.
Negotiations with functional managers, in an organization competing for scarce human resources, are forecasted to delay project completion. | Negotiations ended within a timeframe that did not cause project delays.
Issues, raised by board members, about the financial viability of the project, are preventing the project from moving forward as planned. | The project team met and satisfactorily addressed the board member’s concerns of the project’s financial viability which allowed the project to move forward as planned.

Best Practices
The following approaches are recommended best practices for issue management:

- **Escalation Process** – An issue escalation process should be determined as a part of the overall issue management planning activities and should be documented.
- **Documentation** – All issues, regardless of how minor they seem, should be centrally documented using some type of issue tracking system or log. An issue log template is provided at the end of this guide for use in the absence of something more sophisticated.
- **Minimum Requirements** - Tools used to manage issues should contain (at a minimum) a unique identification number, priority, issue description, impact summary, action steps, current status, and issue owner.
- **Resolution Statement** - Issues should be stated in such a way that it is clear how they can be resolved.
  
  *Example:* Instead of “The project needs resources”, use “The project requires two mid-level Java developers before the first week of January to meet the project delivery date in April”.
- **Prioritization** - Issues should be prioritized, assigned specific owners, with next steps and due dates documented. Issue ownership should be communicated clearly to those responsible for action items.
- **80/20 Rule** - Be mindful of the “80/20 rule”, which says that 80% of the project impact will come from approximately 20% of the documented issues. Concentrate the majority of mitigation efforts on issues that pose the greatest potential threat to project success.
- **Regular Review** - Regular review of issues and the issue log is a highly recommended practice. The review process should occur daily for complex projects and at least weekly for simple projects. Open issues should be reviewed at each project team status meeting and progress made on the issues should be recorded in the issue log.
- **Issue History** - Closed issues should remain in the issue log as a historical record and to facilitate lessons learned activities.
Practice Activities
The practice of issue management is iterative. It is conducted throughout the project lifecycle and involves the following activities. Templates relating to these activities are provided on the last page of this guide.

- **Review Issues** - Regularly review (at least weekly for a simple project; perhaps daily for a complex project) existing project issues and identify new ones.
- **Issue Log** - Establish and maintain an issue log. Instructions for using the issue log should be provided within the template.
- **Resolve Issues** - Work towards issue resolution, maintaining close collaboration with stakeholders.
- **Regular Updates** - Regularly update (at least weekly for a simple project; perhaps daily for a complex project) the issue log with current information.
- **Communicate** - Regularly communicate (at least weekly for a simple project; perhaps daily for a complex project) with stakeholders about the status of open issues.
- **Documentation** - When an issue is resolved, record the resolution in the issue log. Instructions for recording issue resolution should be provided within the issue log template.
- **Escalation** - If an issue remains unresolved for a lengthy period of time (we may want to specify a time range here), the issue should be escalated using the agreed upon escalation procedure.
- **Lessons Learned** - The issue log should be reviewed at the end of the project in a timely fashion so that lessons learned, can be documented and included in the project’s lessons learned analysis.

Practice Attributes
This section provides a list of practice attributes to help project teams determine when and how Issue Management impacts a project.

<table>
<thead>
<tr>
<th>Practice Owner</th>
<th>CDC UP Project Office – NCPHI</th>
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<tbody>
<tr>
<td><strong>Criteria</strong></td>
<td>All projects, regardless of type or size, should have an issue log which is maintained by the project manager who uses the log to manage and monitor issue management activities.</td>
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<tr>
<td><strong>Estimated Level of Effort</strong></td>
<td>Minimal, especially if regularly managed.</td>
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<tr>
<td><strong>Prerequisites</strong></td>
<td>N/A</td>
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<td><strong>Practice Dependencies</strong></td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Practice Timing in Project Life Cycle</strong></td>
<td>Issue management is an activity that takes place throughout the entire project lifecycle.</td>
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<td><strong>Additional Information</strong></td>
<td>N/A</td>
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Related Templates/Tools
Below is a list of template(s) related to this practice. Follow the link below to download the document(s).
http://www2.cdc.gov/cdcup/library/matrix/default.htm

- An issue log to record and manage issues
- A checklist for effective issue management