Chapter 1: Closing Your Contracts and Your Project

Exam Objectives

✓ Confirm that the project scope and deliverables are complete by attaining final acceptance by the project sponsor and customer.

✓ Facilitate project closure by transferring ownership and management of project deliverables.

✓ Formally close the project and all contracts by obtaining legal, financial, and administrative closure, thus eliminating further liability.

✓ Write the final project report that communicates final project performance, including any variances and project issues. Distribute to appropriate stakeholders.

✓ Conduct a thorough project review to collect and document lessons learned and contribute them to the organization's knowledge base.

✓ Collect, organize, and archive project and contract documents and records to comply with regulatory requirements, retain for future projects, and be available for audit purposes.

✓ Gain customer and stakeholder feedback to determine satisfaction level, enhance relationships, and provide constructive project evaluation.

There are a lot of exam objectives for the Closing process group even though it only has two processes: Close Project or Phase and Close Procurements. In this chapter, you see that the actions needed to conduct an effective close-out are similar regardless of whether you are closing a procurement, a phase, or a project.

Closure does not occur only at the end of the project. You can conduct closure activities at any time in the project. Keep in mind that one of the processes is Close Project or Phase. You will be closing out some phases of the project early in the project life cycle. In addition, you will perform close-out activities on procurements as they are completed instead of waiting until the end of the project to close out procurements.
Quick Assessment

1. (True/False). Contracts are closed only at the close of the project.

2. Terminating a contract early because of a change in marketplace conditions is known as ______ ______ ______.

3. Mediation is a type of ______ ______ ______.

4. What technique would you use to determine what worked well on a procurement and what can be improved?

5. Identifying best practices that can be passed on and understanding the source of poor performance is documented in a(n) ______ _____ report.

6. Which document should you measure project completion against?

7. (True/False). Close-out activities begin after the product has undergone final acceptance.

8. A contract that is terminated because one of the parties is about to default is said to be terminated for ______.

9. Two very important stakeholders you should approach for information about your project are your ______ and your ______.

10. (True/False). If a project is terminated early or put on hold, you should conduct project closure activities.
Answers

1 False. Contracts can be closed out at any point in the project. See “Closing Your Procurements.”

2 Termination for convenience. Terminating a contract for convenience does not imply fault for either party; it indicates that there is no longer a need for the project or that circumstances have changed. Look at the information in “Terminating for convenience.”

3 Alternative Dispute Resolution. Mediation and arbitration are both types of Alternative Dispute Resolution (ADR). Check out “Dispute resolution.”

4 Procurement audit. A procurement audit is used to determine what worked well on a procurement and what can be improved so future procurements are managed better. Read the information in “Procurement audits.”

5 Lessons learned. A lessons learned report documents information you want to pass on for future projects, both good and bad. Go over “Learning from projects.”

6 Project management plan. You measure project completion against the project management plan, which contains the scope statement, baselines, and other relevant project information. Go over the information in “Close Project or Phase: Inputs.”

7 False. Close-out activities should be conducted throughout the project. You should close each phase in the project life cycle as well as collect lessons learned throughout the project. See the section “Close Project or Phase: Inputs.”

8 Cause. If either party defaults or is about to default, the other party can terminate the contract for cause. See “Termination for cause.”

9 Sponsor, customer. You should always determine your customer’s level of satisfaction with the product and the project. After all, your customer is the reason why the project exists. Your sponsor can give you a strategic perspective of how well you met your project objectives. See “Whom to talk to.”

10 True. If a project is terminated early, you should document the scope that was completed, the scope that is in progress, and any lessons learned from the project. Look at “Close Project or Phase: Tools and Techniques.”
Knowledge and Skills for the Closing Processes

Closing processes don’t just happen at the end of a project. They happen whenever you close a procurement or a phase. Keep the following list of cross-cutting skills in mind as you read through the information in this chapter.

✦ Information management tools, techniques, and methods
✦ Targeting communications to intended audiences

Questions in the Closing process group account for 8% of the exam. You should expect 16 questions on the two processes in this process group.

Closing Your Procurements

Close Procurements is one of the two closing processes. This process supports the Close Project or Phase process but doesn’t necessarily happen at the same time. However, to close the project, all procurements must be closed. The exception to this is if you have open claims or appeals. Open claims are handled by the legal department.

Because contracts are legal documents, the project manager does not usually have the authority to close them out. Generally, the project manager will inform a contract administrator that the contract project work has been completed. It is then up to the contract administrator to formally close out the contract.

**Close Procurements.** Completing each procurement.

To close out a procurement, you use the procurement management plan for the details and guidelines associated with contract closure. All procurement documents need to be indexed for lessons learned and future reference. Procurement documents include performance reports, invoices, and contractual change documentation. Your organization may use information from contractor performance reports and documentation to evaluate contractors for future work.

**Terminating a contract**

Contracts can be terminated for a variety of reasons, such as termination by mutual agreement, termination for cause, and termination for convenience.

Terminating a contract by mutual agreement is self-explanatory. If both parties agree that the contract should be cancelled, they need to follow the requirements in the termination clause of the contract. Termination for cause
and termination for convenience have different contractual obligations associated with them, so look at both of those methods of termination a little closer.

**Termination for cause**
Termination for cause occurs when either party has breached or is about to breach the contract. This is also known as *defaulting* on the contract.

Here are two examples of seller default:

- The seller can’t deliver the quality of work promised, and there is no evidence that the seller will be able to.
- The clause *Time is of the Essence* is in the contract, and it’s abundantly clear that the seller can’t meet the delivery date. (Read more about *Time is of the Essence* in Book VIII, Chapter 3.)

The following are examples of buyer default:

- The buyer is in significant arrears for payment, and it’s obvious that the buyer can’t catch up on back payments and make future payments.
- The buyer is obligated to provide some element or component of the deliverable for the seller to be able to complete the contract. If the buyer doesn’t deliver the element, the buyer is defaulting on its part of the contract.

**Terminating for convenience**
Many contracts have a clause that allows the buyer to terminate the contract at its convenience. Examples of reasons to terminate for convenience include the following:

- Another project takes higher priority, and the company decides to cancel or delay the current project.
- The market changes, and there is no longer a need for the project.
- Because of a reorganization, new leadership has other priorities.
- Financial landscape has shifted. A company’s quarterly earnings were worse than expected, and the organization has decided to cut costs based on projected earnings.

A contract terminated for convenience doesn’t reflect poorly on either party. It just means there is no longer a need for the contracted goods.
Compensation

Depending on the reason for termination (cause or convenience), there is a difference in the compensation due to the seller. If a contract is terminated for cause, the buyer need only reimburse the seller for the accepted work. However, if the contract is terminated for convenience, the buyer must reimburse the seller for accepted work and any preparations for work and any partially completed work. Here’s a scenario from my running childcare center example.

You get a call from the sponsor, Morgan Cuthbert, to come to her office right away. When you get there, Morgan informs you that she has great news. The cafeteria vendor has informed her that it can reorganize the kitchen area and make room for a separate food storage and food prep area for the childcare center. The cafeteria is adjacent to the childcare center, so by building a simple doorway, you will have plenty of kitchen space. This is great news because you can use the planned kitchen space for other activities for the childcare center.

Although this is good news, you realize that the kitchen contractor, Kit’s Kitchens, has already drawn up plans for the kitchen, laid in the rough plumbing, and preordered some cabinets. You understand that you have to terminate Kit’s contract and pay for any work in progress. Upon returning to your desk, you call the kitchen contractor and set up a meeting.

At the meeting, you explain the situation to Kit and assure her that you have every intention of paying for completed work, work in progress, and any preparation for future work.

The following week you meet with Kit again. She tallied expenses for work in progress for the electrician, plumber, and carpenter. You think the expenses are fair and agree to them. There is a $500 cancellation fee for the cabinets. You talk with the general contractor to see whether the cabinets can be used anywhere else in the childcare center so you don’t have to count the $500 as a total loss. It turns out that you can use the cabinets for art supplies and sleeping mats. Therefore, you decide to keep the cabinet order as is.

At the end of the meeting, you agree to provide all the documentation to the contract administrator and get the invoices through the system. You assure Kit that you will move ahead with contract closure and get her payment as soon as possible.

In this scenario, the contract termination was in no way a reflection of the work that Kit provided. The contract will go through the termination process, the buyer will compensate the seller fairly, and the contract will be closed.
The roles and responsibilities associated with early contract termination should be clearly documented in the contract.

**Close Procurements: Tools and Techniques**

When closing contracts, you need to make sure all claims are resolved. You should also review the entire procurement process so you can learn from the current procurement to improve future procurements. I talk about both techniques in the following sections.

**Dispute resolution**

In the event of a disagreement that the contracted parties can’t resolve via negotiation, they need to follow the dispute resolution clause in the contract. Most contracts require the parties to enter into some type of mediation or arbitration. Some contracts require the issue be resolved by using one of these forms of ADR, and others require that ADR be tried before the least appealing alternative of litigation. (Read more about ADR, mediation, and arbitration in Book VIII, Chapter 4.)

When the issue or claim can’t be resolved while the project is active, the claim may remain open even though the project has been closed.

**Procurement audits**

A procurement audit is a formal review of the procurement process on a single procurement, or for the procurement process used on the project as a whole. The purpose is to review each process in the procurement to identify those areas that worked well as well as those areas that can be improved in the future.

The audit begins by looking at the procurement planning process:

- Was the make-or-buy analysis complete?
- Was the contract type appropriate?
- How effective was the procurement management plan?
- Did the statement of work (SOW) accurately reflect the work that needed to be done without saying how it should be done?
- Were the procurement bid documents complete?
- Were the source selection criteria appropriate?
The procurement audit should also review the following information for conducting procurements:

✦ Were a sufficient number of qualified sellers identified?
✦ Did the bidder conference go smoothly and answer all bidder questions? (See Book VI, Chapter 3.)
✦ Did the procurement negotiations end up with a win-win situation?
✦ Was the contract developed and signed in a timely manner?
✦ Was the contract complete without requiring numerous changes and revisions?
✦ Was the contract sufficiently clear so as not to result in numerous disputes and misunderstandings?

While administering the contract, the procurement audit will assess the following:

✦ How well contract changes were handled
✦ Performance reports and performance reviews
✦ How well inspections at the seller location went
✦ The effectiveness of the payment system
✦ The completeness and organization of the project records
✦ How well disputes and issues were handled

When auditing vendors, you want to record areas that worked well and areas that should be improved the next time. This information can be used the next time a similar procurement is needed.

A sample procurement audit form is shown in Figure 1-1. The form is generic, but it shows the type of information that you would gather for a procurement audit.
## Procurement Audit

### Vendor Performance Audit

<table>
<thead>
<tr>
<th>What Worked Well:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scope</strong></td>
<td>Describe aspects of product scope that were handled well.</td>
</tr>
<tr>
<td><strong>Quality</strong></td>
<td>Describe aspects of product quality that were handled well.</td>
</tr>
<tr>
<td><strong>Schedule</strong></td>
<td>Describe aspects of the project schedule that were handled well.</td>
</tr>
<tr>
<td><strong>Cost</strong></td>
<td>Describe aspects of the project cost that were handled well.</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>Describe any other aspects of the procurement that were handled well.</td>
</tr>
</tbody>
</table>

### What Can Be Improved:

<table>
<thead>
<tr>
<th>What Can Be Improved:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scope</strong></td>
<td>Describe aspects of the product scope that could be improved.</td>
</tr>
<tr>
<td><strong>Quality</strong></td>
<td>Describe aspects of the product quality that could be improved.</td>
</tr>
<tr>
<td><strong>Schedule</strong></td>
<td>Describe aspects of the project schedule that could be improved.</td>
</tr>
<tr>
<td><strong>Cost</strong></td>
<td>Describe aspects of the project cost that could be improved.</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>Describe any other aspects of the procurement that could be improved.</td>
</tr>
</tbody>
</table>

### Procurement Management Process Audit

<table>
<thead>
<tr>
<th>Process</th>
<th>Followed</th>
<th>Tools and Techniques Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan Procurements</td>
<td>yes or no</td>
<td>Describe any tools or techniques that were effective for the process.</td>
</tr>
<tr>
<td>Conduct Procurements</td>
<td>yes or no</td>
<td>Describe any tools or techniques that were effective for the process.</td>
</tr>
<tr>
<td>Administer Procurents</td>
<td>yes or no</td>
<td>Describe any tools or techniques that were effective for the process.</td>
</tr>
<tr>
<td>Close Procurents</td>
<td>yes or no</td>
<td>Describe any tools or techniques that were effective for the process.</td>
</tr>
</tbody>
</table>

### Description of Good Practices to Share:

Describe any good practices that can be shared with other projects or that should be incorporated into organization policies, procedures or processes. Include information on lessons learned.

### Description of Areas for Improvement:

Describe any areas that should be improved with the procurement process. Include information that should be incorporated into policies, procedures or processes. Include information on lessons learned.

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**Figure 1-1:**
A Procurement Audit form.
Close Procurements: Outputs
A key part of closing a contract is reviewing the SOW and ensuring that all elements are complete and accepted. You should go through the deliverables list to make sure that all the deliverables meet the contractual requirements, all procedures and contract clauses were followed, and also that all the technical and other contract documentation is available.

It's a good practice to formally accept deliverables throughout the life of the contract, especially for large contracts. Closing the contract should merely formalize all the accepted work that has been delivered. After you accept all the work, you notify the contract administrator that the terms of the contract have been met. The contract administrator can then take the necessary steps to formally close out the contract.

Because a contract is a legal document, it's important to collect and archive all procurement documentation and correspondence. The following is a partial list of information that you need to collect, index, and archive:

- Schedules
- Invoices and payment history
- Performance reports
- Technical documentation
- Contract change requests
- Corrective action reports
- Contract disputes and their resolutions
- Inspections
- Audits
- Performance evaluations

The contract documentation is a part of the overall project documentation that you need to archive prior to project closure. The following sections take a look at that final process.

Procurements need to be closed out from the legal, financial, and administrative perspectives. Legally, you need to make sure the statement of work is complete and also that all deliverables have been formally accepted. Administratively, you want to make sure that all the terms and conditions of the contract have been followed and also that the procurement documentation has been appropriately archived. Financially, you need to make sure all the payments have been made, including award fees, incentive fees, and fixed fees as appropriate.
**Close Project or Phase**

The Close Project or Phase process marks the culmination of a phase in the project life cycle or the completion of the entire project.

**Close Project or Phase.** Finalizing all activities across all Project Management process groups to formally complete the project or phase.

**Close Project or Phase: Inputs**

To formally close a phase in the project life cycle or the entire project, you need to compare the accepted deliverables to the information in the project management plan. Remember: “Accepted deliverables” are an output from the Validate Scope process (see Book VII, Chapter 2).

**Accepted deliverables**

At the end of a *phase*, you should get formal approval and acceptance for any completed deliverables. At the end of the *project*, you have all accepted deliverables, the approvals for each deliverable, and the final approval and acceptance for the final product.

**The project management plan**

The project management plan documents the project life cycle and has instructions on how to close out a project phase. Each phase has specific deliverables that need to be complete and accepted before it can be considered closed. Oftentimes, additional criteria need to be met before considering a phase closed. Some examples are identified in the following section.

**Organizational process assets**

Your organizational process assets (OPAs) describe phase and project closure guidelines. Examples of phase closure criteria include

✦ **Performance reviews:** At the end of the phase, the project sponsor and/or customer along with the project management team discuss the performance metrics for the phase and the project overall. They look at the risk events that occurred during the current phase, the status of issues, and any corrective actions that need to be taken.

✦ **Project management plan updates:** The end of a phase is a good time to make sure that all the elements of the project management plan are accurate and up to date. Some project managers wait for a phase gate to update the plans with the latest version.
✦ **Project document updates:** If you have an iterative life cycle, you can collect information for the next iteration during the Close Project or Phase process. You can also go through the assumption and risk logs and close out any out-of-date items, and update the remaining items. Some project managers collect new requirements, changes, assumptions, and risks when they formally initiate the new phase.

✦ **Lessons learned:** It’s a good practice to collect lessons learned as you go through the project. At the end of each phase, formalizing the lessons learned for the phase and integrating those lessons into the next phase helps ensure that you don’t repeat the same mistakes. I discuss lessons learned in greater detail shortly.

**Close Project or Phase: Tools and Techniques**

You’ll use your team expertise and customer feedback to measure deliverables against elements in the project management plan to determine whether the project is complete. The project scope statement documents product scope, product acceptance criteria, and project deliverables. You should review the project scope statement; requirements documentation; baselines for scope, schedule and cost; and any other relevant information in the project management plan to make sure that you successfully met all the project and product completion requirements.

Analytical techniques are used to record final project performance measurements for technical, schedule, and budget performance. The causes of any variances should be identified and recorded in a lessons learned document.

Conduct a lessons learned meeting at least at the end of every phase because you often have different resources in different phases. Make sure to get stakeholder input from those people who leave the project before it’s complete.

In the event that the project terminates before completion, you will conduct the formal closure process with the existing information. You want to document the progress that was made, the work that remains unfinished, and the reason for project termination. Oftentimes, a project is restarted months or even years later, so having good records of the project’s status when it was closed is helpful.

**Close Project or Phase: Outputs**

The results of the Close Project or Phase process include a project review with lessons learned and a final report that you will distribute to appropriate stakeholders. You also need to formally transition project resources (team members) and the final product and then organize the project archives.
A project review accomplishes two outcomes: the lessons learned document and the final project report. You will use interviewing and feedback techniques similar to those you used when you were first identifying requirements and defining scope (see Book III, Chapter 1) to collect and compile feedback. First I discuss gathering information for lessons learned and then move into discussing the final report.

**Learning from projects**

To make sure it will benefit future projects, conducting a meaningful lessons learned exercise takes time and effort. Notice I said *meaningful*. Lessons learned is different from documenting all the reasons why a project wasn’t successful. It takes discipline to identify the root cause of good as well as not-so-good results. In addition, you need to document them in a way that they can be used and useful for future projects.

Here are some quick examples of not-so-great documentation and then some better documentation. Although each scenario might be relevant to your project, the not-so-great examples aren’t productive information to pass along. Consider my alternatives.

*Not so great*

Don’t expect Jim to work on weekends because he has kids in soccer practice.

*Better*

Document in the Team Operating Agreement people’s availability to work overtime so they can fit it into their schedule if needed.

*Not so great*

Make sure you ask Jennifer from Marketing whether she has anything to add before you baseline your budget.

*Better*

Do a full stakeholder analysis to identify all stakeholders who will have requirements for the project.

**Whom to talk to**

Here are some ways you can conduct a lessons learned exercise. You could all stakeholders to come together and share what worked and what they would do differently next time. Another approach is to interview people one-on-one or in small groups to get more specific and perhaps sensitive information. You should include suppliers and vendors in your lessons learned. You can take the information from a contract close-out report and a procurement audit, or you can interview the contractor about his experience working on
the project. The point is that you want a broad spectrum of input for the lessons learned document.

Don’t wait until the end of the project to collect your lessons learned information. At the minimum, you should gather this info at the end of each phase — especially for long projects! By the end of a long project, some team members will have moved on, and most team members will have forgotten events that occurred in the beginning phases.

For those topics that you think can help improve the performance of projects in the future, you should share the results with management, the Project Management Office (PMO), and other project managers. The same is true for sharing events that went poorly on your project so others don’t find themselves in the same situation.

Two very important stakeholders you should approach for information about your project are your sponsor and your customer. In addition to identifying areas for improvement and those areas that worked well, conduct a satisfaction survey. This can be informal, such as asking how you can do a better job of satisfying them in the future, or you can send an electronic survey. Ask open-ended questions when asking them how the project went from their perspective. This will help maintain and improve your working relationship.

An important part of closing a phase and the project is to measure stakeholder satisfaction. The obvious stakeholder you want to check with is the customer. However, don’t forget other stakeholders, such as your team members and the sponsor. If something you’re doing isn’t working for team members, you want to know about the issue so you can address it.

**What to talk about**

When collecting information about the project, have specific and general questions designed to get people talking. You might want to gather information about specific areas of the project, such as

- Effectiveness of requirements gathering
- How well scope was controlled
- The quality of the schedule
- How well communication worked
- Effectiveness of risk management

The lessons learned form in Figure 1-2 is a starting place for some of the relevant areas you can inquire about when collecting lessons learned.
## LESSONS LEARNED

<table>
<thead>
<tr>
<th>Project Title:</th>
<th>Date Prepared:</th>
</tr>
</thead>
</table>

### Project Performance Analysis

<table>
<thead>
<tr>
<th></th>
<th>What Worked Well</th>
<th>What Can Be Improved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requirements definition and management</td>
<td>List any practices or incidents that were effective in defining and managing requirements.</td>
<td>List any practices or incidents that can be improved in defining and managing requirements.</td>
</tr>
<tr>
<td>Scope definition and management</td>
<td>List any practices or incidents that were effective in defining and managing scope.</td>
<td>List any practices or incidents that can be improved in defining and managing scope.</td>
</tr>
<tr>
<td>Schedule development and control</td>
<td>List any practices or incidents that were effective in developing and controlling the schedule.</td>
<td>List any practices or incidents that can be improved in developing and controlling the schedule.</td>
</tr>
<tr>
<td>Cost estimating and control</td>
<td>List any practices or incidents that were effective in developing estimates and controlling costs.</td>
<td>List any practices or incidents that can be improved in developing estimates and controlling costs.</td>
</tr>
<tr>
<td>Quality planning and control</td>
<td>List any practices or incidents that were effective in planning, assuring, and controlling quality. Specific defects are addressed elsewhere.</td>
<td>List any practices or incidents that can be improved in planning, assuring, and controlling quality. Specific defects are addressed elsewhere.</td>
</tr>
<tr>
<td>Human resource availability, team development, and performance</td>
<td>List any practices or incidents that were effective in working with team members and developing and managing the team.</td>
<td>List any practices or incidents that can be improved in working with team members and developing and managing the team.</td>
</tr>
<tr>
<td>Communication management</td>
<td>List any practices or incidents that were effective in planning and distributing information.</td>
<td>List any practices or incidents that can be improved in planning and distributing information.</td>
</tr>
<tr>
<td>Stakeholder management</td>
<td>List any practices or incidents that were effective in managing stakeholder expectations.</td>
<td>List any practices or incidents that can be improved in managing stakeholder expectations.</td>
</tr>
<tr>
<td>Reporting</td>
<td>List any practices or incidents that were effective in reporting project performance.</td>
<td>List any practices or incidents that can be improved in reporting project performance.</td>
</tr>
<tr>
<td>Risk management</td>
<td>List any practices or incidents that were effective in the risk management process. Specific risks are addressed elsewhere.</td>
<td>List any practices or incidents that can be improved in the risk management process. Specific risks are addressed elsewhere.</td>
</tr>
<tr>
<td>Procurement planning and management</td>
<td>List any practices or incidents that were effective in planning, conducting, and administering contracts.</td>
<td>List any practices or incidents that can be improved in planning, conducting, and administering contracts.</td>
</tr>
<tr>
<td>Process improvement information</td>
<td>List any processes that were developed that should be continued.</td>
<td>List any processes that should be changed or discontinued.</td>
</tr>
<tr>
<td>Product-specific information</td>
<td>List any practices or incidents that were effective in delivering the specific product, service, or result.</td>
<td>List any practices or incidents that can be improved in delivering the specific product, service, or result.</td>
</tr>
<tr>
<td>Other</td>
<td>List any other practices or incidents that were effective, such as change control, configuration management, etc.</td>
<td>List any other practices or incidents that can be improved, such as change control, configuration management, etc.</td>
</tr>
</tbody>
</table>
### Lessons Learned

#### Risks and Issues

<table>
<thead>
<tr>
<th>ID</th>
<th>Risk or Issue Description</th>
<th>Response</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Identify specific risks that occurred that should be considered to improve organizational learning.</td>
<td>Describe the response and its effectiveness.</td>
<td>Indicate what should be done to improve future project performance.</td>
</tr>
</tbody>
</table>

#### Quality Defects

<table>
<thead>
<tr>
<th>ID</th>
<th>Defect Description</th>
<th>Resolution</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Identify quality defects that should be considered to improve organizational effectiveness.</td>
<td>Describe how the defects were resolved.</td>
<td>Indicate what should be done to improve future project performance.</td>
</tr>
</tbody>
</table>

#### Vendor Management

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Issue</th>
<th>Resolution</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>List the vendor. Describe any issues, claims, or disputes that occurred.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Other

<table>
<thead>
<tr>
<th>Areas of Exceptional Performance</th>
<th>Areas for Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify areas of exceptional performance that can be passed on to other teams.</td>
<td>Identify areas that can be improved on for future projects.</td>
</tr>
</tbody>
</table>

Your lessons learned become part of the organization’s knowledge base, which means that they will be OPAs for the next project.
The final report and archiving information

Your final project reports should include information on the project objectives and how you met them, and also explain any variances from the success criteria. A key component in the final report is a final financial accounting and analysis. You should compare the final total expenditures with the original budget and identify the causes of variances. For complex multiyear projects, you’ll want to show the information based on the organization’s fiscal year and compare that with the original funding requirements. Additional accounting information that may be required includes

- A comparison of the financial metrics, such as NPV, FV, and so forth, that were used to justify the project in the first place. (See Book II, Chapter 1.)
- Final earned value (EV) numbers and metrics if EVM is being used. (See Book VIII, Chapter 1, for EVM metrics.)
- A description of the work packages that had significant variances and a root cause analysis on the variance.
- Significant variances.
- Validation or explanation of assumptions about cost estimates, including the “cost of money.” (See Book II, Chapter 1.)

The final report will be sent to all key stakeholders identified in the communication management plan.

Hopefully, you collected and organized your project documentation throughout the project. That ongoing effort makes it a lot easier when you have to archive information at the end. How you archive information depends on the nature of the project. For some projects, you may want to have a box of files or set of notebooks organized alphabetically, chronologically, or by topic. In other situations, all your archives will be electronic and posted to an intranet. Some of the information you archive may be sensitive and can be stored only in a secure facility.

Personally, if I manage a one-year project, I take about four weeks to complete the transition, conduct a lessons learned session, write the final report, and organize and archive the project records. You should archive at least

- The charter, project management plan, and project documents — especially all signed documents with approvals
- Baselines, performance reports, variance analysis, and final results
- Written communications, presentations, and reports
Stakeholder satisfaction surveys and lessons learned
Assumption, risk, and issue logs
Procurement documentation and records
Technical documentation

Archiving information is usually the last activity on a project. Frequently, the project manager is the only person still active at this point. The archived information is helpful for future projects. In many cases, regulations require that you maintain records and documentation for a specified amount of time: for example, warranty information, changes that involve regulations, and project information that could be audited for taxes or legal compliance or used in contractual legal disputes and lawsuits.

**Transitioning the product and resources**

Having a few loose ends at the end of the project is not uncommon. Usually, new projects require your attention, so you need to make sure you take any open items and assign them to someone for follow-up and closure. When transitioning a product or service to either a customer or to operations, you need to train the recipients on how to work the new product and how to support and maintain it. If there isn’t formal documentation and training for this purpose, make sure you spend sufficient time transferring your knowledge to whoever will be maintaining the product or service.

After the lessons learned and the project documentation is collected and organized, you can begin to release your resources. For team members, write up a performance assessment. This can be formal or informal. You should identify the behaviors and actions that contributed to the project’s success as well as any areas for improvement. If your organization doesn’t have policies about this type of action, use your discretion on how you approach this. Most people want to improve, but you need to be sensitive and not hand out unsolicited advice!

An important part of releasing resources is having a celebration or some kind of event to acknowledge what the team has accomplished and thank the members for their contributions and participation. For large projects, this can be a nice event or dinner with awards, certificates, and speeches by senior management. Or, you could go as casual as having a potluck. Whatever the case, make sure you take the time to thank people and leave them with a feeling of closure.
If your project was at a work site, make sure that all the equipment is in better shape than when you found it, the supplies are stocked appropriately, and the area is neat and clean.

Key Terms

There aren’t too many new terms in this chapter. By the time you reach the Closing processes, you already have come across most of the relevant terms.

✦ Termination for cause
✦ Termination for convenience
✦ Procurement audit
Chapter Summary

This chapter discusses the two processes that have to do with closing activities: Close Project or Phase and Close Procurements. Both processes entail collecting, organizing, and archiving information as well as documenting areas that went well and areas that didn’t go so well.

✦ You will close out each project procurement when the contract is complete. Contracts can be considered complete when the statement of work (SOW) is complete and all contractual obligations have been fulfilled.

✦ Sometimes, procurements are closed before they are complete. In some situations, both parties agree to terminate the contract early. In other situations, contracts are terminated early for cause, or for convenience. The amount of compensation is different, depending on whether the contract is terminated for cause or convenience.

✦ Before the contract can be closed, all open invoices need to be paid, and all disputes need to be resolved via negotiation, mediation, arbitration — or, in the worst case scenario, litigation.

✦ When contractual obligations have been met, you notify the contract administrator, who formally closes the contract.

✦ A procurement audit assesses the effectiveness of the procurement processes and the specific vendor or contractor for future reference.

✦ All procurement documentation and records need to be indexed and archived. This information becomes part of the overall project close-out.

✦ You should close out each phase of the project. The phase deliverables should be formally accepted and signed off. In addition, you should update all documentation and conduct a lessons learned exercise from the phase. If the project is closed before completion, you should document the reasons why.

✦ Doing a good lessons learned exercise entails a 360-degree interview and discussion with stakeholders. You should ask general and specific questions. The lessons learned will become part of the project close-out documentation. It should also record areas that can be used for other projects to increase their probability for success and reduce the probability of failure.

✦ After the project is complete, you release team members and other project resources, such as locations, equipment, and material.

✦ Make sure that the product or result is properly transitioned to the customer or the operational division that will maintain it.
Prep Test

Multiple Choice

1 Which is not a reason for early contract termination?
   A  ○ For convenience
   B  ○ For cause
   C  ○ Force majeure
   D  ○ Mutual agreement

2 Under which conditions will you have to reimburse a vendor for expenses incurred for preparing to do work for you?
   A  ○ If you don’t deliver a key component needed to start the work
   B  ○ If there is a Time is of the Essence clause
   C  ○ If the vendor can’t meet the deliverable requirements
   D  ○ If you change your mind about doing the project

3 If you want to review the procurement processes to determine the extent they were followed and how well they worked, you should conduct a(n)
   A  ○ Inspection
   B  ○ Walk-through
   C  ○ Procurement validation
   D  ○ Procurement audit

4 When is the best time to formally accept contract deliverables?
   A  ○ At the end of a phase
   B  ○ At the end of the project
   C  ○ During quality control
   D  ○ At the beginning of a phase

5 Completion of the project is measured against the
   A  ○ Project scope statement
   B  ○ Requirements documentation
   C  ○ Project management plan
   D  ○ Scope baseline
6. Which information is not relevant for a lessons learned document?
   A. □ Which team members received bonuses
   B. □ Methods to improve requirements gathering
   C. □ An effective technique for team building
   D. □ A risk response that worked well

7. Writing a performance assessment for the lead engineer is part of which closing activity?
   A. □ Archiving documentation
   B. □ Conducting lessons learned
   C. □ Accepting all deliverables
   D. □ Releasing project resources

8. The final activity on the project is
   A. □ Sending out a survey to assess stakeholder satisfaction
   B. □ Archiving project information
   C. □ Closing out a contract
   D. □ Transitioning the product or service to operations or the customer

Scenario 1

The electrician on your project hasn’t showed up for work the past two days. You drove by his place of business, and it was abandoned.

1. This is an example of termination for
   A. □ Convenience
   B. □ Default
   C. □ Completion
   D. □ Untimely delivery
Scenario 2
You’re ready to close out a contract for the design and development of a secure network in your new location. The contractor sends you an invoice that includes $35,000 worth of work you don’t think you should be billed for. You’re fine with the majority of the bill, but you think that the $35,000 is the contractor’s responsibility. After discussing this with the contractor, you’re not able to come to a negotiated settlement, so you have to find a more formal way of resolving the issue.

1 Of the following, which is the least preferable way to resolve this dispute?
   A ☐ Litigation
   B ☐ Mediation
   C ☐ Arbitration
   D ☐ Binding arbitration

2 Which of the following is the most informal way to resolve the dispute?
   A ☐ Litigation
   B ☐ Mediation
   C ☐ Arbitration
   D ☐ Binding arbitration
Answers

Multiple Choice

1. C. Force majeure. Force majeure allows the obligated party to delay or not perform contractual duties. It isn’t a reason for early contract termination. See “Terminating a contract.” For more information on force majeure, you can look over Book VIII, Chapter 4.

2. D. If you change your mind about doing the project. If you change your mind about doing a project, you’re terminating for convenience. You must pay the seller for accepted goods and preparation expenses for any work not yet delivered. Look at “Compensation.”

3. D. Procurement audit. A procurement audit reviews the processes and the performance on a procurement or on the procurement process as a whole. Go to “Procurement audits.”

4. A. At the end of a phase. You should accept deliverables as they are complete, but at the very least, at the end of each phase. See the information in “Close Procurements: Outputs.”

5. C. Project management plan. Project completion is measured against the project management plan. Review “The project management plan.”

6. A. Which team members received bonuses. Information on team member performance, bonuses, or feedback is not part of the lessons learned document. Go over “Learning from projects.”

7. D. Releasing project resources. Part of releasing project resources is providing feedback to team members. Check out “Transitioning the product and resources.”

8. B. Archiving project information. Archiving project information is usually the last activity performed on a project. See “The final report and archiving information.”

Scenario 1

1. B. Default. The electrician is out of business. He has breached his contract by not finishing the work. Check out “Termination for cause.”

Scenario 2

1. A. Litigation. Litigation is costly and time consuming. As such, it is the least desirable method to resolve conflict. Review “Dispute resolution.”

2. B. Mediation. Mediation can be as informal as having a third party review the situation and make a decision. Go over the information in “Dispute resolution.”